

WALL FRAMING NOTES
110-530 9-14

1. See sheet S1 for standard construction details.
2. Shearwalls and braced wall panels are designated with  and are above the level of framing shown unless otherwise noted. See SHEARWALL/BRACED WALL SCHEDULE "4/S1" for specific and general requirements.
3. Sheath all exterior walls and cripple walls per 6A of "4/S1" unless otherwise noted (or shown as a shearwall or braced wall panel on the plan).
4. Stud walls shall be framed with 2x4 studs at 16" o/c to a maximum height of 10'-0" for bearing and 14'-0" maximum for non-bearing. Stud walls over 10'-0" high or supporting more than two floors shall be framed with 2x6 studs at 16" o/c unless otherwise noted on plans.
5. All studs shall be framed full height (continuous pieces) between supporting floors, ceilings and roofs unless otherwise noted. End joints in wall double top plates shall be offset a minimum of 48 inches. See detail "1/S1" for a typical lap splice connection.
6. Foundation cripple walls shall be framed of studs not smaller in size than the studs in the level above. Cripple walls greater than four feet high shall be 2x6 at 16" o/c minimum when supporting two floor levels.
7. Cripple wall stud lengths less than 6 inches shall be framed of solid double 2x lumber.
8. Header sizes shall be as specified on the plans and, where not noted, shall be per the schedule shown in detail "15/S1" unless otherwise noted. Interior bearing walls below framing are shown shaded. All exterior walls are bearing walls unless otherwise noted.
9. Posts indicated on framing plans are below unless otherwise noted. Post sizes shall be indicated on the highest level framing plan on which they occur. Provide a post at each level below the uppermost post to foundation or beam/header support.
10. Posts indicated but not called out are a minimum of (2) 2x studs. When posts support 4x members, provide 1/2" plywood filler between studs. See detail "3/S1" for headers framed into walls. Provide multiple studs under all multiple joists and roof girder trusses to match bearing width.
11. At floor levels, solid block in the joist space under all posts to the full width of the post.
12. Notches and holes cut in sawn framing shall be per details "2/S1" and "7/S1" unless otherwise noted. Relocate notch or increase framing sizes as necessary to accommodate holes. Do not notch or bore holes in post or studs at holddown locations. Do not notch studs for "let in" bracing.
13. Wall framing at chimneys and fireplaces shall be full height. Chimneys shall be 24 inches minimum in each direction. Where splicing of studs is required, studs shall be doubled. The splice length shall be a minimum of one-third the length of the individual piece and shall be noted with (2) 16d at 8" o/c. Top plates interrupted by full height framing shall be strapped with a continuous C516 strap. Extend the strap 30 inches beyond each end of the full height framing and nail with (2) 8d at 4" o/c to the top plates and 2x blocking unless otherwise noted. Chimneys and fireplaces requiring splicing shall be sheathed with plywood or panel siding.
14. At wall heights greater than 10'-0", provide 2x blocking at 10'-0" o/c maximum. At vertical board siding, provide 2x blocking at 24" o/c maximum unless otherwise noted.
15. Provide a minimum of 3 studs at each corner.

DESIGN CRITERIA			
10-20			
Vertical Loads	Dead Load	Live Load	Snow Pg
Roof (6 : 12)	14 PSF	18 PSF	N/A
Roof (4 : 12)	14 PSF	20 PSF	N/A
Upper Floor	13 PSF	40 PSF	N/A
Lower Floor	10 PSF	40 PSF	N/A
Wall	18 PSF		N/A
Occupancy Category		R-3	
Wind Design Data			
Wind Speed		95 MPH	
Wind Exposure Category		C	
Building Risk Category		II	
Internal Pressure Coefficient		N/A	
Earthquake Design Data			
Seismic Importance Factor		I	
Spectral Response Accelerations		Ss = 2.525 S1 = 0.965	
Spectral Response Coefficients		Sps = 2.020 Sp1 = 0.901	
Seismic Design Category		E	
Seismic Force Resisting System		bearing wall system light framed walls w/ wood structural sheathing	
Response Modification Factor		R = 6.5	
Analysis Procedure		Equivalent Procedure	
Soil / Foundation:			
Allowable Soil Bearing Pressure:		1800 PSF	
Soil Site Classification		D	

The engineer shall be contacted at least 48 hours in advance of the scheduled field observation. The engineer shall notify the Building Official and the contractor of any discrepancies or deviations from the approved plans. A written statement will be submitted to and approved by the Building Official prior to final inspection. Note that structural observations are required, or waive the responsibility for the inspection required by CBC Sections 110 and 1705.

SPECIAL INSPECTION NOTES

11-005 6-19

In addition to the inspections required by CBC Section 110, special inspections in accordance with CBC Section 1704 are also required. Special inspections shall be performed by one or more agencies employed by the owner. The special inspector or agency shall be qualified in the area of inspections listed under Section 1705 and be approved by the Building Official, the architect of record and Johnson, DeBois, and Forrest. The special inspector shall furnish inspection reports to the Building Official, the architect of record and Johnson, DeBois, and Forrest. All discrepancies shall be brought to the immediate attention of the contractor for correction; then, if not corrected, to the appropriate design professional and the Building Official. The special inspector shall submit a final signed report stating whether or not the work complies with the provisions in conformance with approved plans and specifications and the applicable workmanship provisions of the code.

The following items require special inspection:

1. FABRICATION: Special inspector shall review fabrication and assembly of structural load-bearing members per CBC 1704.2.5.

Exception: Special inspection is not required when work is done on the premises of a fabricator registered and approved to perform such work without special inspection per CBC 1704.2.5.1.

2. SOILS: The Geotechnical Engineer shall provide special inspection of existing site soil conditions, fill placement and load bearing requirements.

Load Bearing

Special inspector shall provide periodic inspections to verify that footing excavations extend to proper depth and have reached proper material to achieve design bearing capacity.

Fill Placement

Special inspector shall provide periodic inspection to observe subgrade and verify the site has been prepared properly and perform classification and testing of compacted fill materials. The special inspector shall provide continuous inspection to verify use of proper materials, densities and lift thickness during placement and compaction of compacted fill

- 5A. Gorge concrete on grade shall be 4 inches thick with #3 @ 18" o/c each way at the centerline of the slab over 4 inches minimum of compacted crushed rock over competent, firm subgrade.
- 5B. Porch slab on grade shall be 4 inches thick with #3 at 18" o/c each way at the centerline of the slab over 4 inches minimum of compacted crushed rock over competent, firm subgrade.
6. All slabs shall be completely separated from foundation stem walls with felt. Slabs shall have 1/8"x1" deep control joints at 12 feet on center maximum in each direction unless otherwise noted.
7. Provide 20'-0" of #4 AWG (American Wire Gauge) bare copper wire in the bottom 2" of the footing/grade beam with the grounding electrode below the electrical panel where occurs.
8. Anchor bolt size and spacing shall be per plan. Bolts shall have 7" minimum embedment into concrete. Bolts shall be located 5" minimum and 12" maximum from ends of sill plates. Bolts shall also be located within the middle third from the edge of the mudsill. Anchor bolts and inserts shall be rigidly held in place prior to concrete placement.
9. Shearwalls and braced wall panels are designated with . See the Wall Framing Notes for general requirements.
10. Sheath all exterior walls and cripple walls per 6A of "4/SI" unless otherwise noted (or shown as a shearwall or braced wall panel on the plan).
11. Shearwall tie down anchors shall be "Holdown" or "Tension Tie" anchors as manufactured by Simpson Strong-Tie Company, Inc. and referenced per the current catalog specifications (i.e. HDU, HTT). See detail "8/SI" for installation requirements. Where the tie down anchor is braced on the foundation plan, then the tie down anchor shall be located just above the first floor framing. If cripple walls occur below the first floor framing, then extend the threaded rod from the foundation up through the cripple wall to the tie down anchor, as shown in detail "8/SI".
12. Foundation vent size and number to be per architectural drawings. Do not locate foundation vents below shearwall posts or header jams with openings greater than 4". Where possible locate in cripple wall framing, near corners and space equally with a min of 5'-4" o/c. See "Foundation Venting" detail for specific structural req's.

FRAMING RANGERS			
110-522		5-110	
FRAMING MEMBER	FACE MOUNT HGR	TOP FLANGE HGR	SLOPED HGR
1 JOIST	IUS	MIT	LSSR
DBL 1 JOIST	MIU	MIT	LSU
2x SOLID SAWN	LUS	JB	LRUZ
DBL 2x SOLID SAWN	LUS	WP	LSSR
3x SOLID SAWN	LUS/HU	HUTF	—
4x SOLID SAWN	LUS	BA	LSSR
6x SOLID SAWN	HU	HUTF	—
1-3/4" LVL/LSL	HU	MIT	LSSR
3-1/2" LVL/PSL/LSL	HU	BA3.56	LSSR
5-1/4" OR 7" LVL/PSL/LSL	HGUS	EGQ	—

Fasteners and connectors for pressure preservative and fire-retardant wood should be of hot dipped zinc-coated galvanized steel, stainless steel, silicone bronze or copper (exception, 1/2" diameter or greater steel bolts used in residential construction). The coating weights for zinc-coated fasteners and connectors shall be in accordance with ASTM A153 and A653 respectively. Fasteners other than nails, wood screws and lag screws shall be permitted to be mechanically deposited zinc-coated steel with coating weights in accordance with ASTM B695, Class SS minimum.

Stainless steel shall be Type 304 or 316. When using stainless steel or hot-dip galvanized connectors, the connectors and fasteners should be made of the same material.

Electroplated/electro galvanized and mechanically galvanized coatings are not considered to be hot-dip. Aluminum, uncoated, painted and other non-approved fasteners may not be used in preservative-treated lumber under any circumstance.

5. Structural panel sheathing shall be APA rated sheathing, exposure 1, conforming to PS-2 or PRP-108 or PRP-210 of the APA "The Engineered Wood Association" unless otherwise noted. Installation and application of sheathing shall be per manufacturer's specifications.

6. Nails used in exterior applications shall be hot-dipped, zinc-coated galvanized box nails, unless otherwise noted. Nails used in pressure treated wood shall be as specified in Note 4. Where nailing causes wood to split, replace member and predrill holes.

All nailing not specifically called out on the plans shall be per CBC Table 2304.10 and detail "9/SI". Nail types shall be as indicated below (also applies to gun nails):

10. Place all lumber joists and beams with the crown up.

11. To minimize lumber shrinkage effects, install and tighten straps and tie down (Holdowns) just prior to covering, whenever possible.

12. Lag screws shall be of good quality (SAE-J429 steel or 33 ksi min). Lag screws require pre-boring as follows:

SHANK DIAMETER	LEAD HOLE (1)	SHANK HOLE (2)
1/4"	5/32"	1/4"
3/8"	7/32"	3/8"
1/2"	5/16"	1/2"
5/8"	3/8"	5/8"

(1) Lead hole depth equals log length
(2) Shank hole depth equals shank length
Do not drive lag screws with a hammer.
Soap or lubricate threads to ease installation.

13. Deck screws shall be of good quality (SAE-J429 steel or 33 ksi min). Pre-drill if necessary to prevent splitting. Use Simpson-DSV, GRK-R4, FastenMaster-TRIO, G-External Grabber-Exterior or equal.

MANUFACTURED WOOD PRODUCTS

11-521 10-18

14. Glu-Lam beams shall conform to ANSI and ASTM D 3737. Glu-Lams shall be combination 24F-V4 for simple span conditions and 24F-V8 for continuous and cantilever conditions unless otherwise noted. Beams shall have standard camber (5000") unless otherwise noted. Glu-Lam beams shall meet the following design properties: E = 1,800,000 psi; Fb = 2400 psi; Fv = 165 psi. GLB's shall be industrial appearance u.o.n.

15. All Glu-Lam beam inspection certificates shall be submitted to the field inspector prior to completion of framing inspection.

ROOF FRAMING NOTES (Manufactured trusses)

110-531 2-15

1. See sheet S1 for standard construction details.
2. See the Framing Notes for shearwall and braced panel general requirements.
3. Roof shall be sheathed with APA rated sheathing, 24/16 minimum, exposure 1, 15/32" minimum thickness (use thicker sheathing as required by roofing manufacturer). Install sheets with face grain perpendicular to supports. Stagger sheets and nail with 8d at 6" o/c edges and 12" o/c field typical unless otherwise noted.
- 4A. The truss diagrams provided on the Roof Framing Plan are for general reference only. See architectural drawings for truss shapes, dimensions, etc. Truss deferred submittal documents (shop drawings and calculations prepared by an engineer licensed in California) shall be submitted to the architect or engineer of record for review. These deferred truss documents shall be forwarded to the Building Official with a notation indicating that they have been reviewed and have been found to be in general compliance with the project design intent. The trusses shall not be installed until the deferred truss submittal documents have been approved by the Building Official.
- 4B. The truss manufacturer shall provide in-plant inspection per CBC 1704.2.5.
- 4C. Trusses shall be designed and installed per the following standards:
 - a. ANSI/TPI 1 "National Design Standard for Metal Plate Connected Wood Truss Construction."
 - b. TPI HB "Commentary and Recommendations for Handling, Installing and Bracing Metal Plate Connected Wood Trusses."
 - c. TPI DBS "Recommended Design Specification for Temporary Bracing of Metal Plate Connected Wood Trusses."
 - d. CBC 2303.4
4. All roof openings shall be between rafters/trusses unless otherwise noted on drawings.
5. Manufactured roof truss design loads: (see notes 7, 8, 9 & 10 for additional loads)

14. California framing shall be 2x6 rafters and 2x8 ridges and hips unless otherwise noted. Brace California framing to typical roof framing below at 48" o/c maximum. Typical roof framing and plywood sheathing shall be continuous below California framed areas. Provide solid blocks or a continuous flat 2x member under the ends of all rafters.

15. Truss members and components shall not be cut, notched, drilled or otherwise altered in any way without written concurrence and approval of a licensed engineer.

STRUCTURAL SHEET INDEX		REVISION
SN	GENERAL NOTES	△
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S12	UPPER FLOOR FRAMING PLAN	△
S13	ROOF FRAMING PLAN	△
S1	STANDARD STRUCTURAL DETAILS	
S2	STRUCTURAL DETAILS	
S3	STRUCTURAL DETAILS	△
S4	STRUCTURAL DETAILS	△

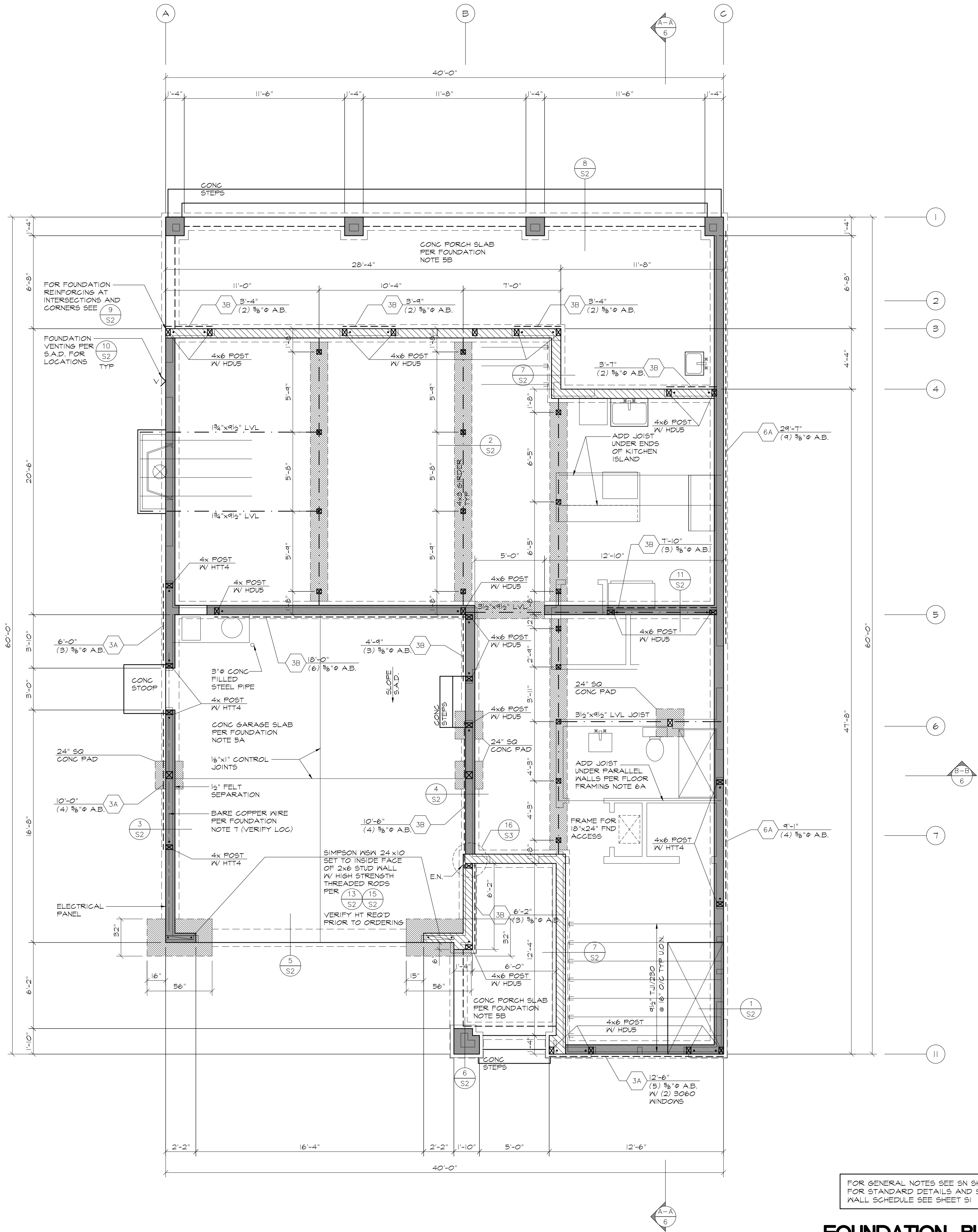
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PRIOR TO THE CONTRACTOR REQUESTING A BUILDING DEPARTMENT FOUNDATION INSPECTION, THE SOILS ENGINEER SHALL ADVISE THE BUILDING OFFICIAL IN WRITING THAT:

1. THE BUILDING PAD WAS PREPARED IN ACCORDANCE WITH THE SOILS REPORT.
2. THE UTILITY TRENCHES HAVE BEEN PROPERLY BACKFILLED AND COMPACTED.
3. THE FOUNDATION EXCAVATIONS COMPLY WITH THE INTENT OF THE SOILS REPORT.

FOUNDATION LEGEND

	STEM WALL AND FOOTING
	RETAINING WALL
	CURTAIN WALL
	CONCRETE PORCH FOOTING
	FOOTINGS



FOR GENERAL NOTES SEE SN SHEETS FOR STANDARD DETAILS AND SHEAR WALL SCHEDULE SEE SHEET S1

FOUNDATION PLAN

SCALE: 1/4"=1'-0"

REVISIONS	BY

File : 20062SP

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Drawn : M.L.

Job : 20062

Sheet

S1.1

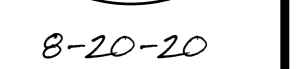
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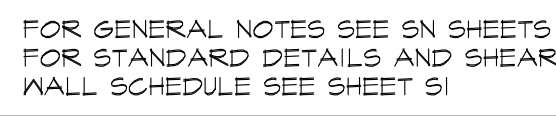
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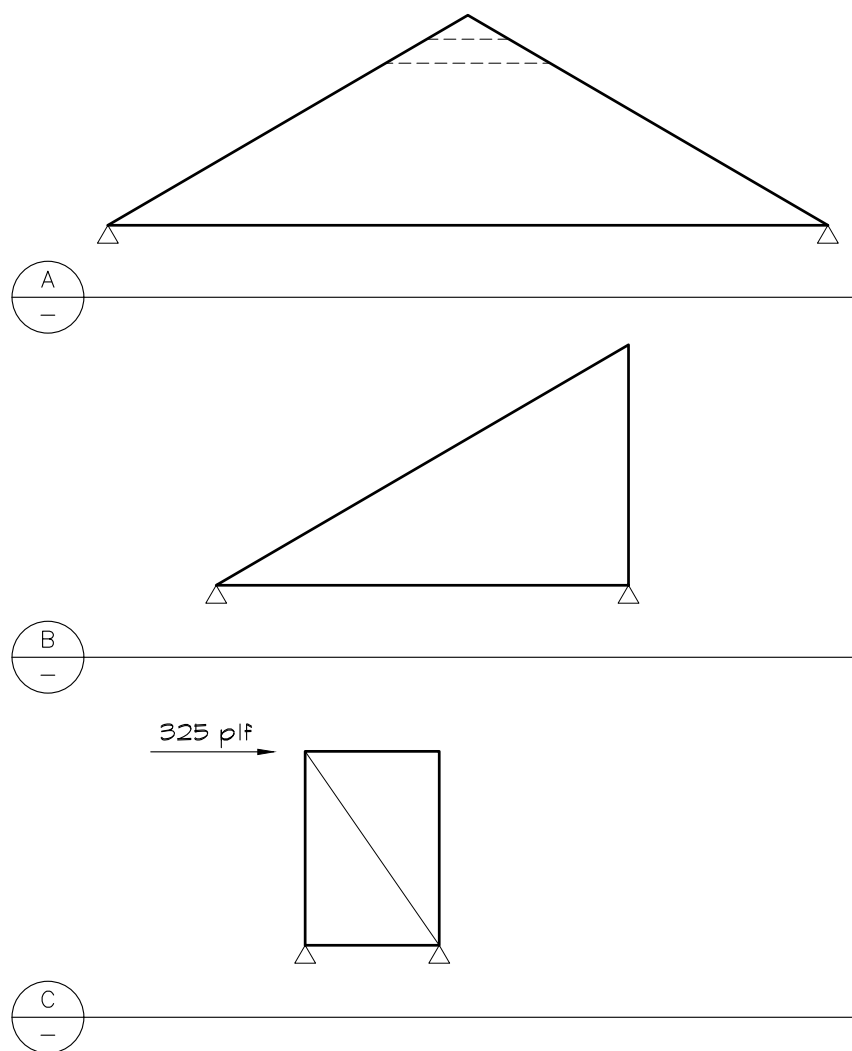
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UPPER FLOOR FRAMING PLAN

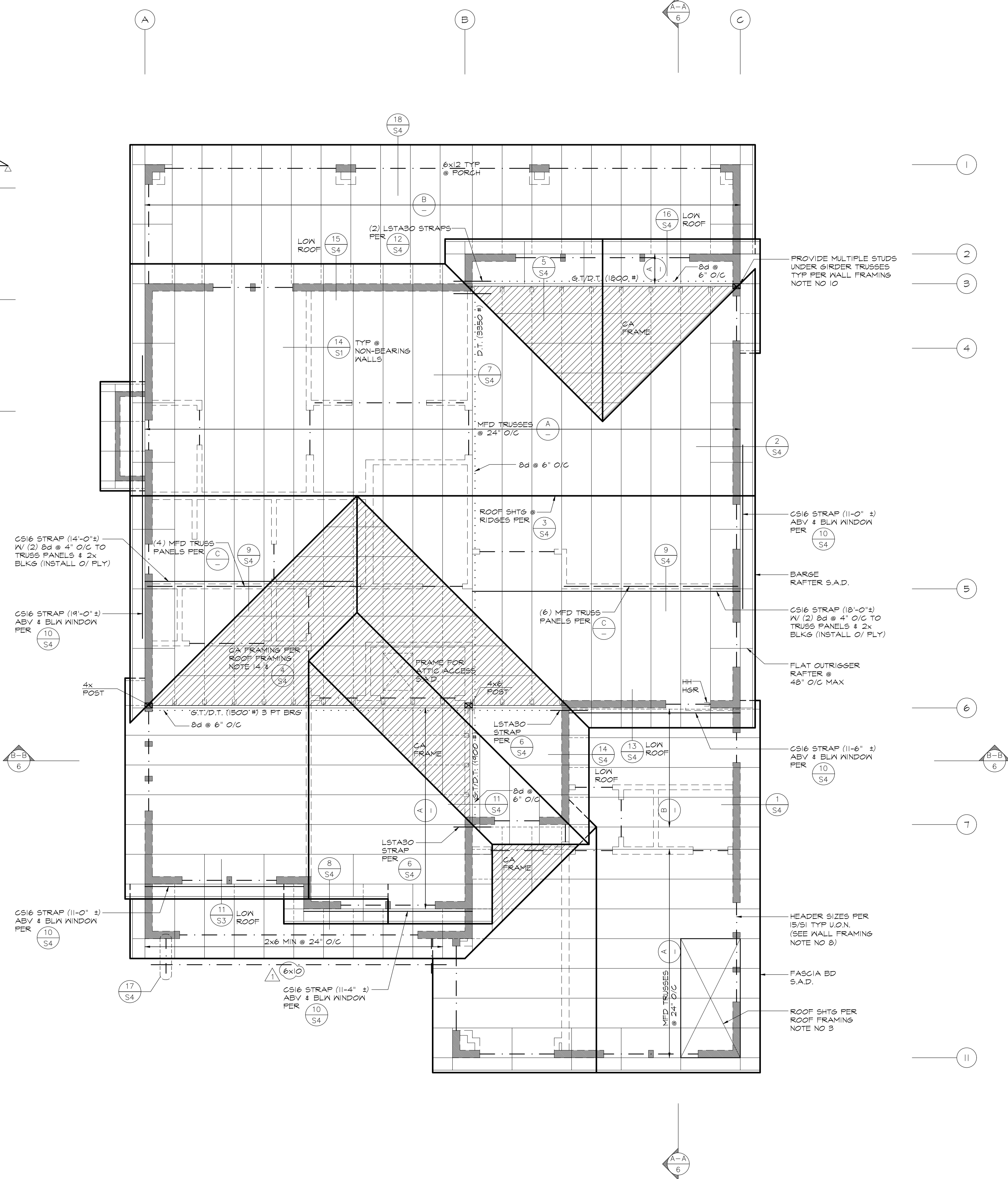
SCALE: 1/4"=1'-0"



TRUSS DIAGRAMS

THESE DIAGRAMS ARE NOT TO SCALE AND ARE SHOWN ONLY TO REPRESENT GENERAL TRUSS CONFIGURATION AND NUMBER OF BEARING POINTS.

- 1 TRUSS MFR TO PROVIDE FOR MECHANICAL AREA AND ALLOW FOR 5'-0"x6'-0" PLATFORM W/ 30" MIN HEIGHT ABOVE
- 2 ATTIC WITH LIMITED STORAGE, SEE ROOF FRAMING NOTE 6
- 3 STUCCO SOFFIT, SEE ROOF FRAMING NOTE 6



FOR GENERAL NOTES SEE SN SHEETS FOR STANDARD DETAILS AND SHEAR WALL SCHEDULE SEE SHEET S1

ROOF FRAMING PLAN

SCALE: 1/4"=1'-0"

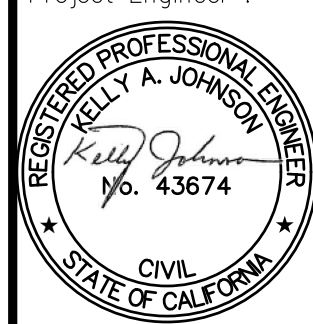
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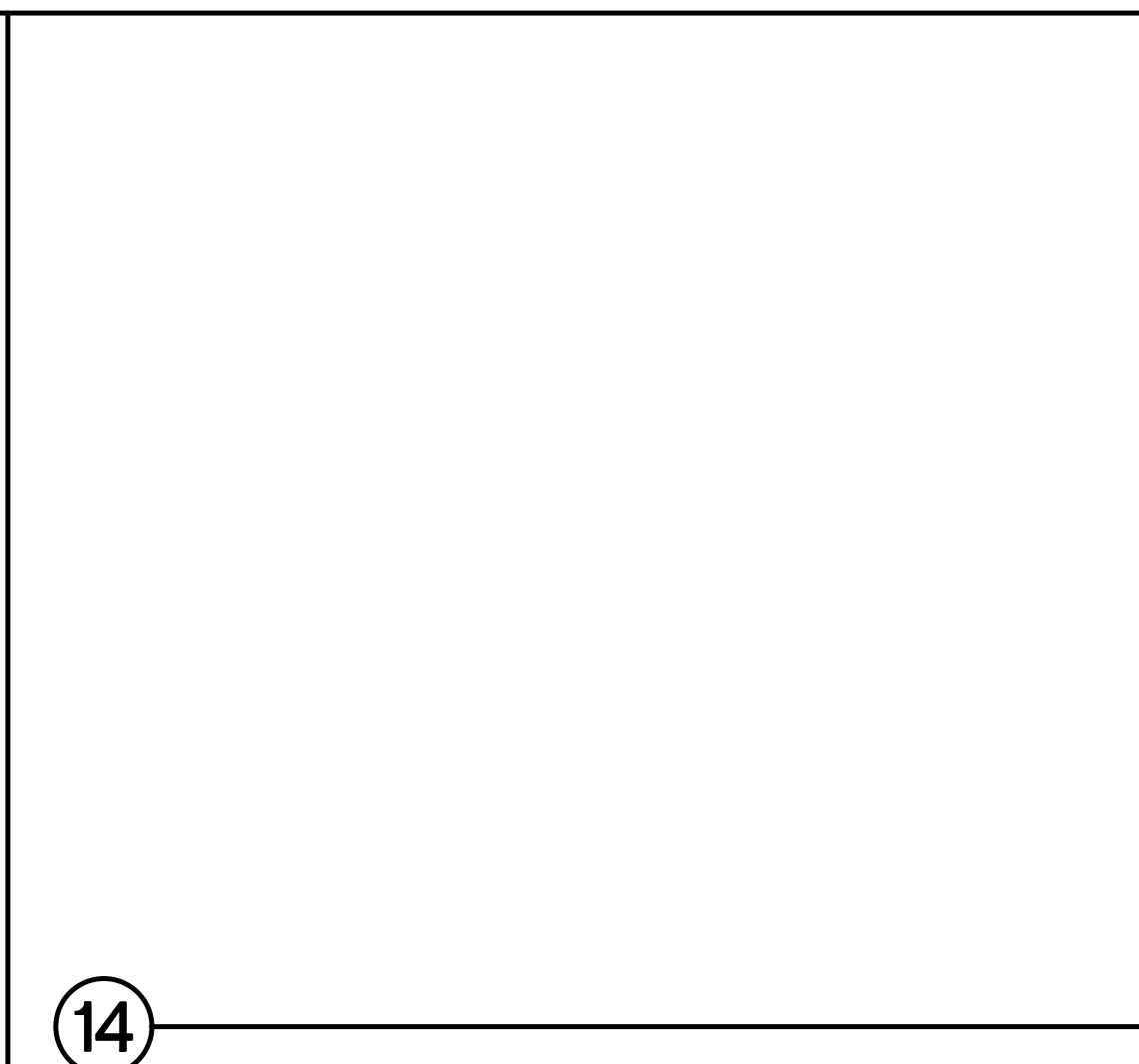
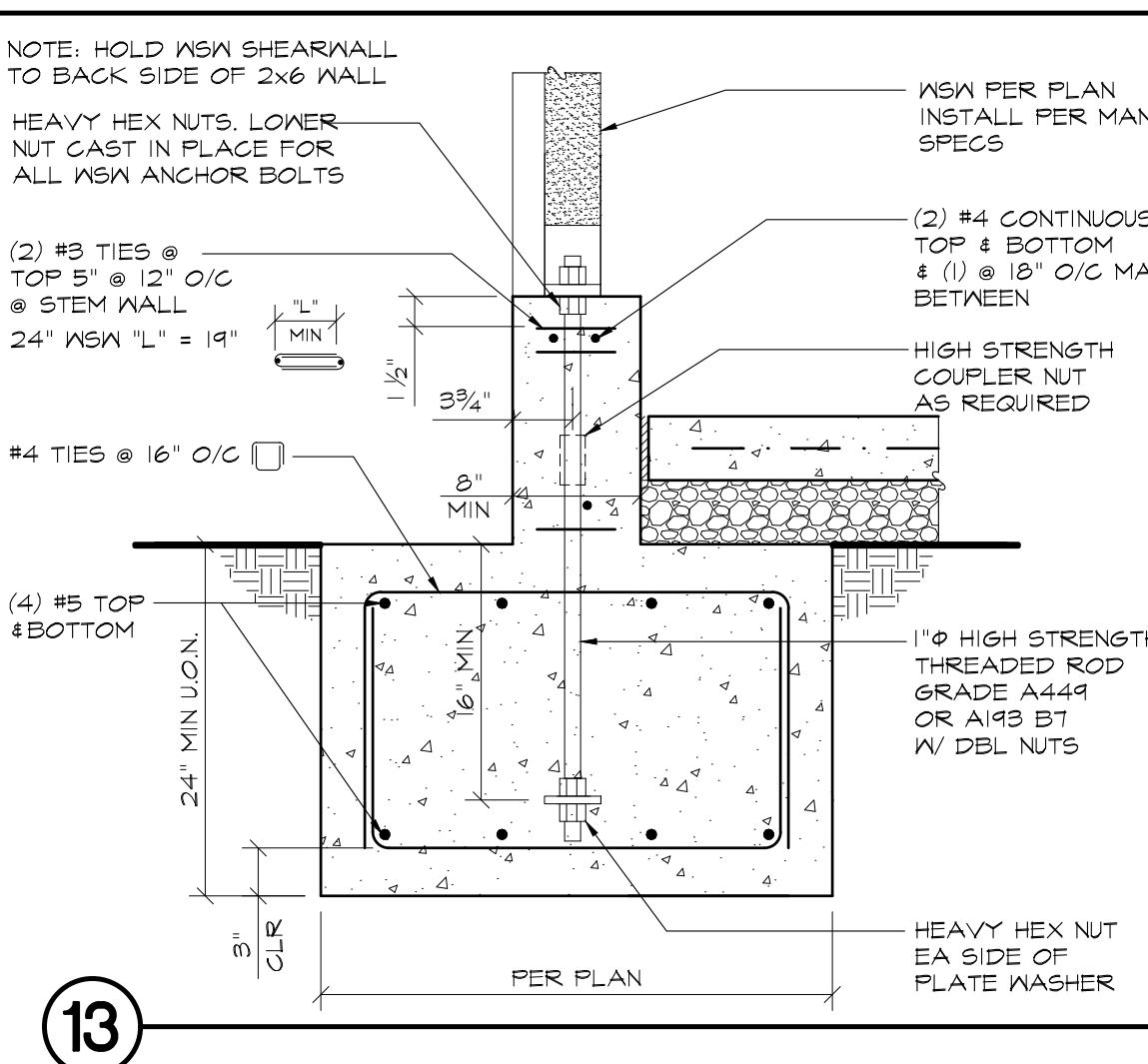
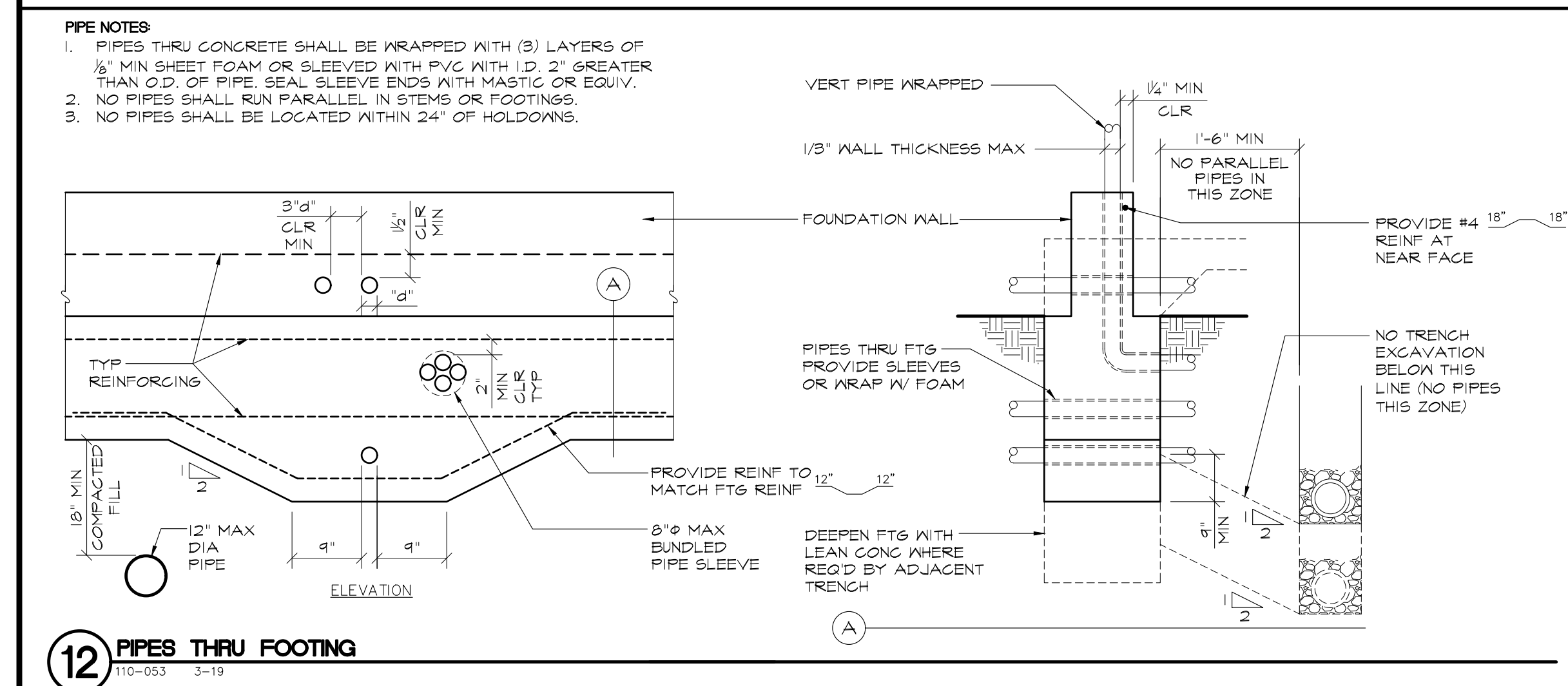
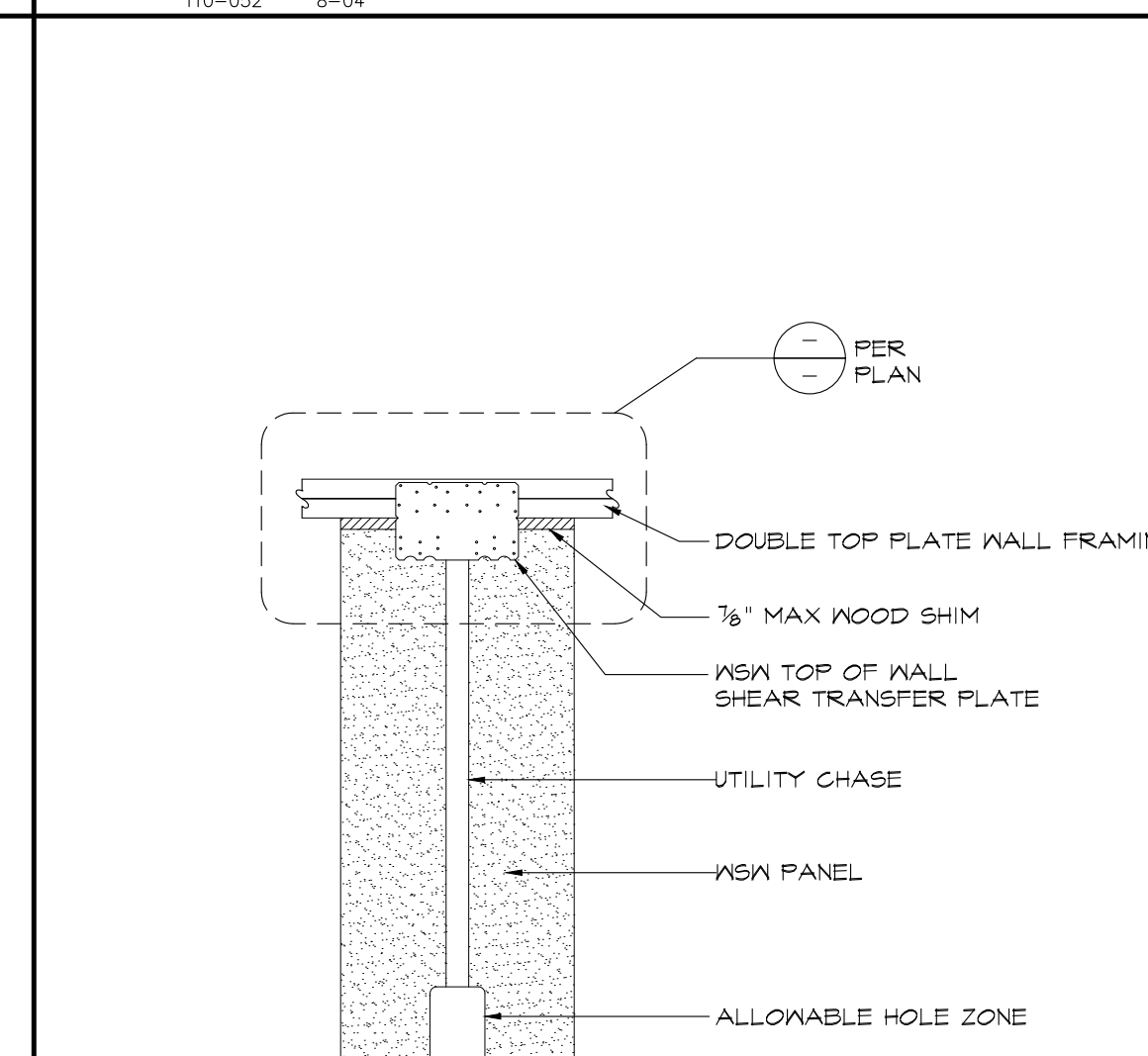
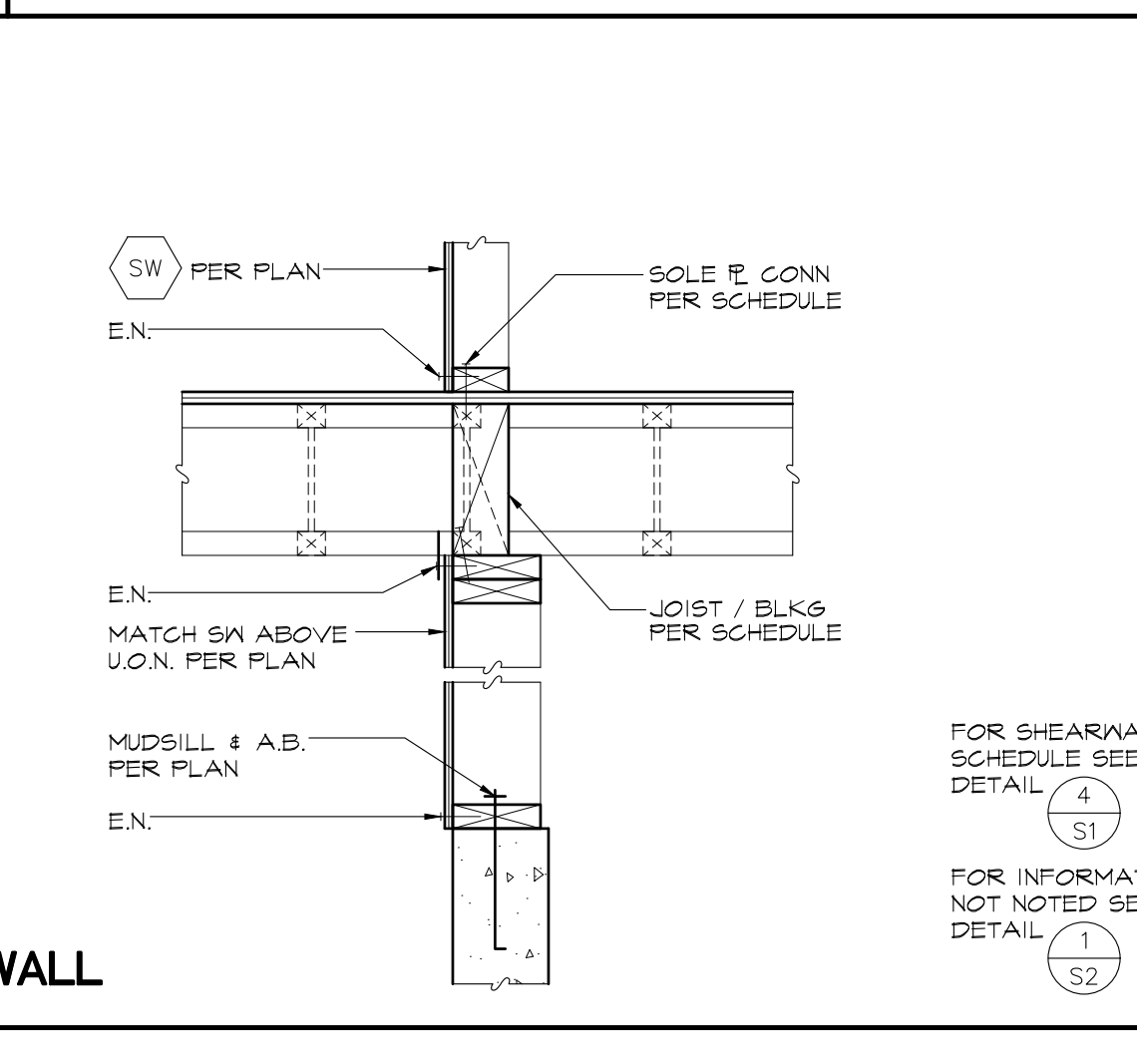
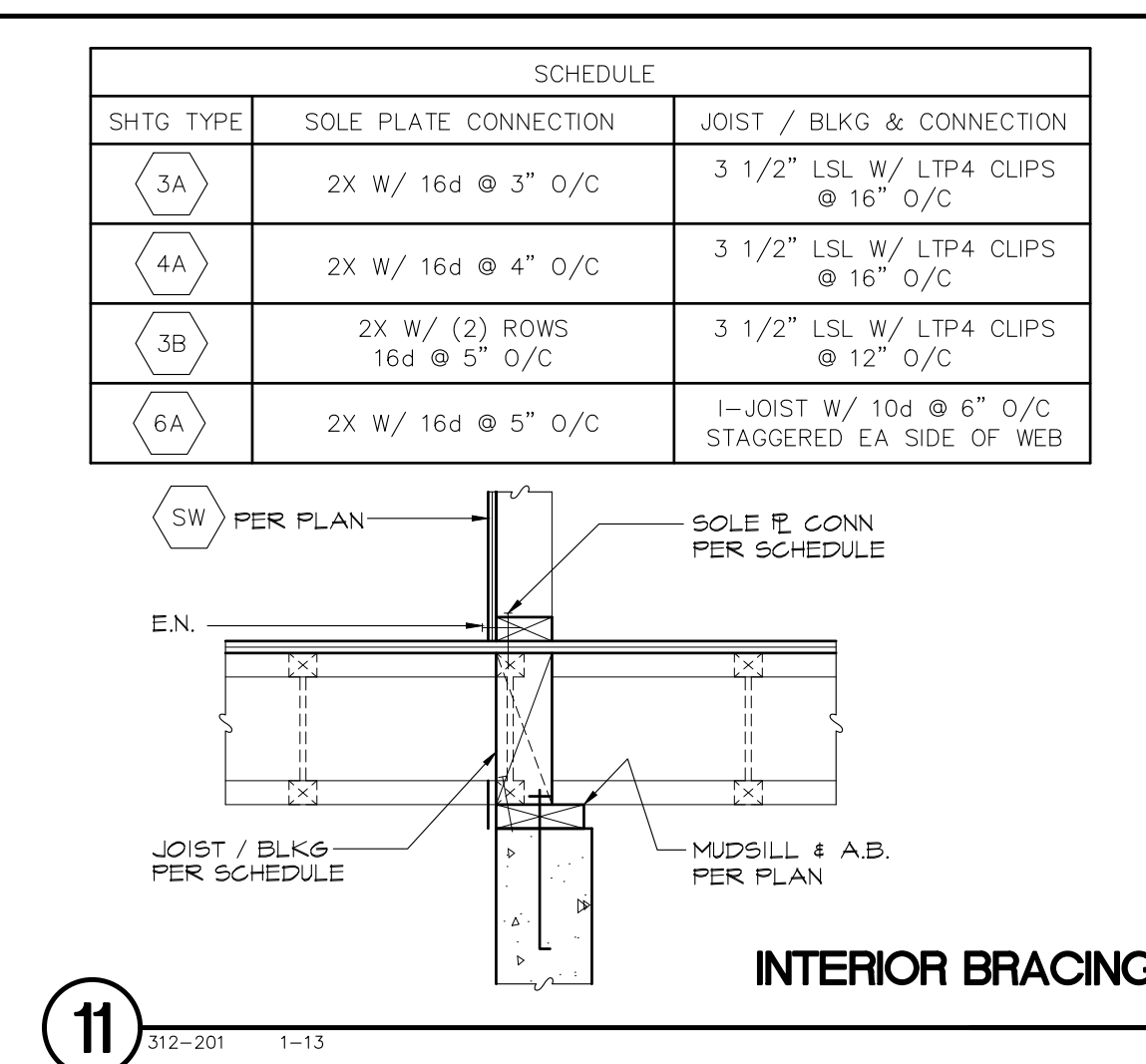
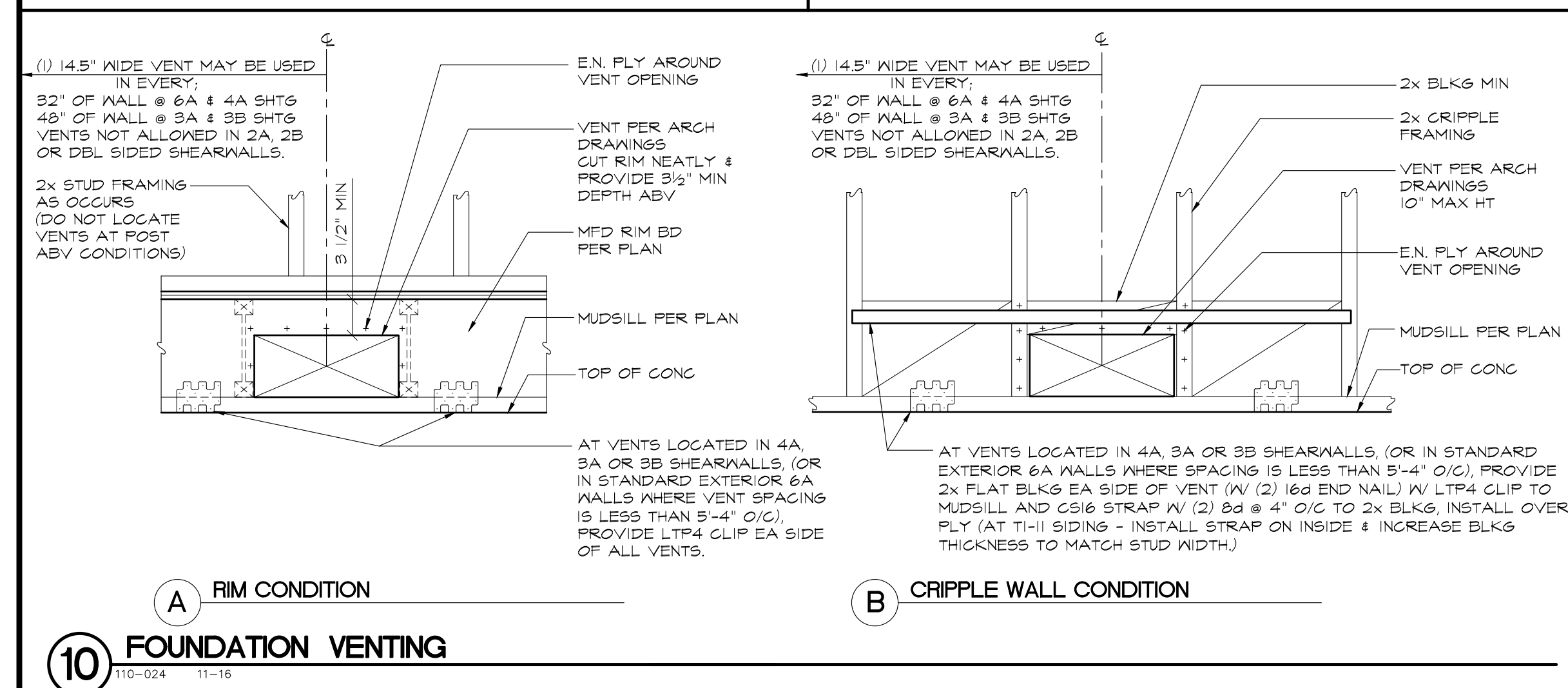
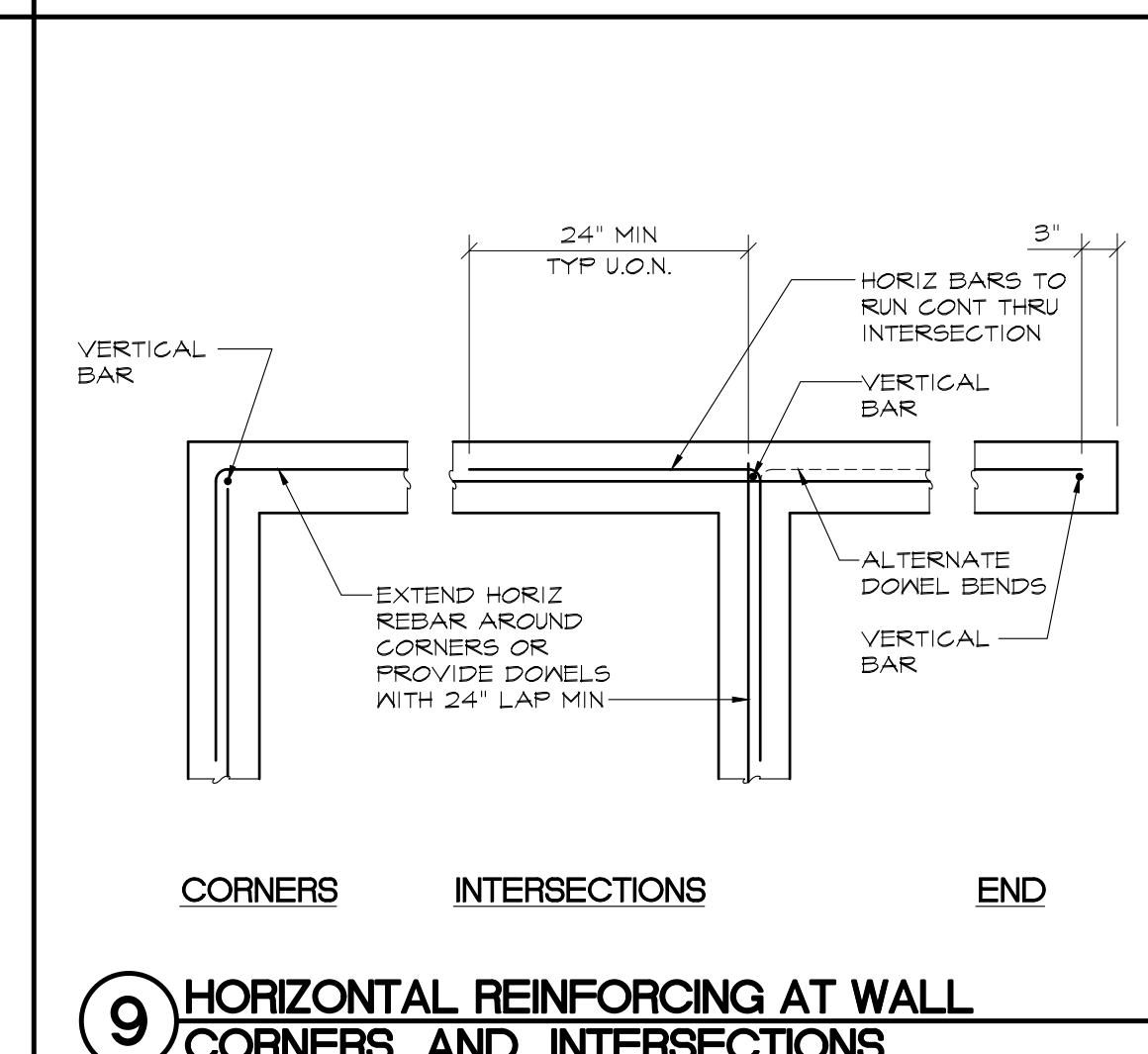
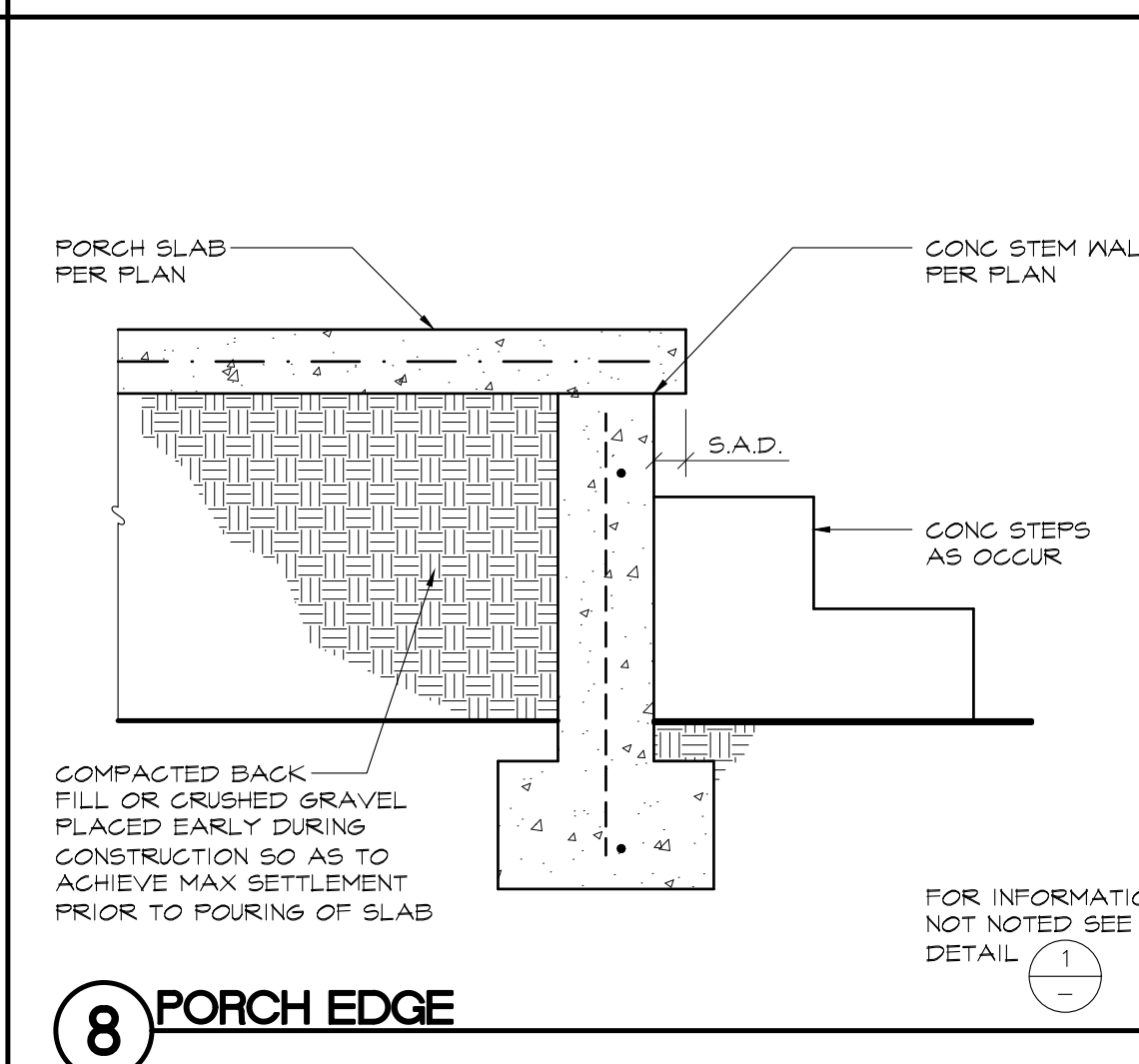
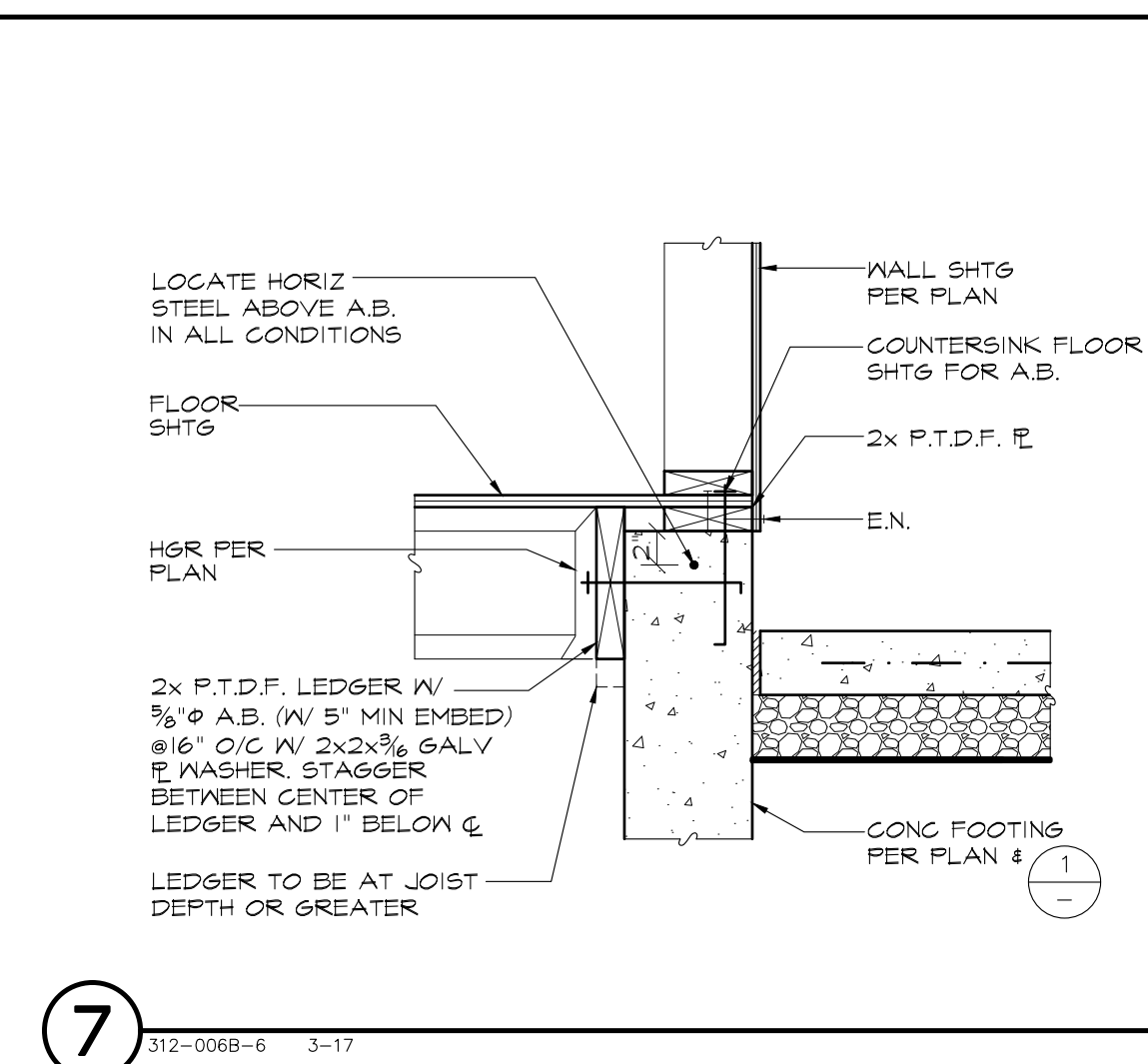
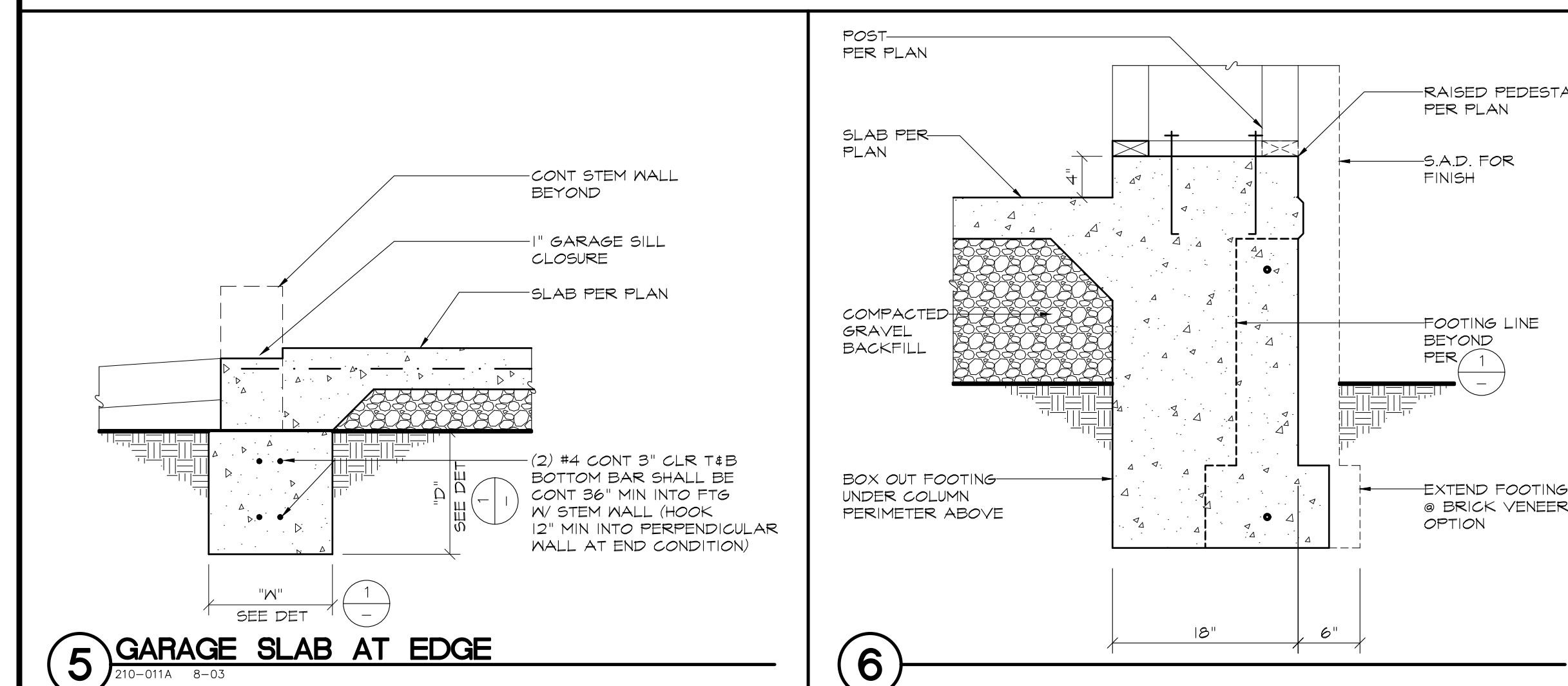
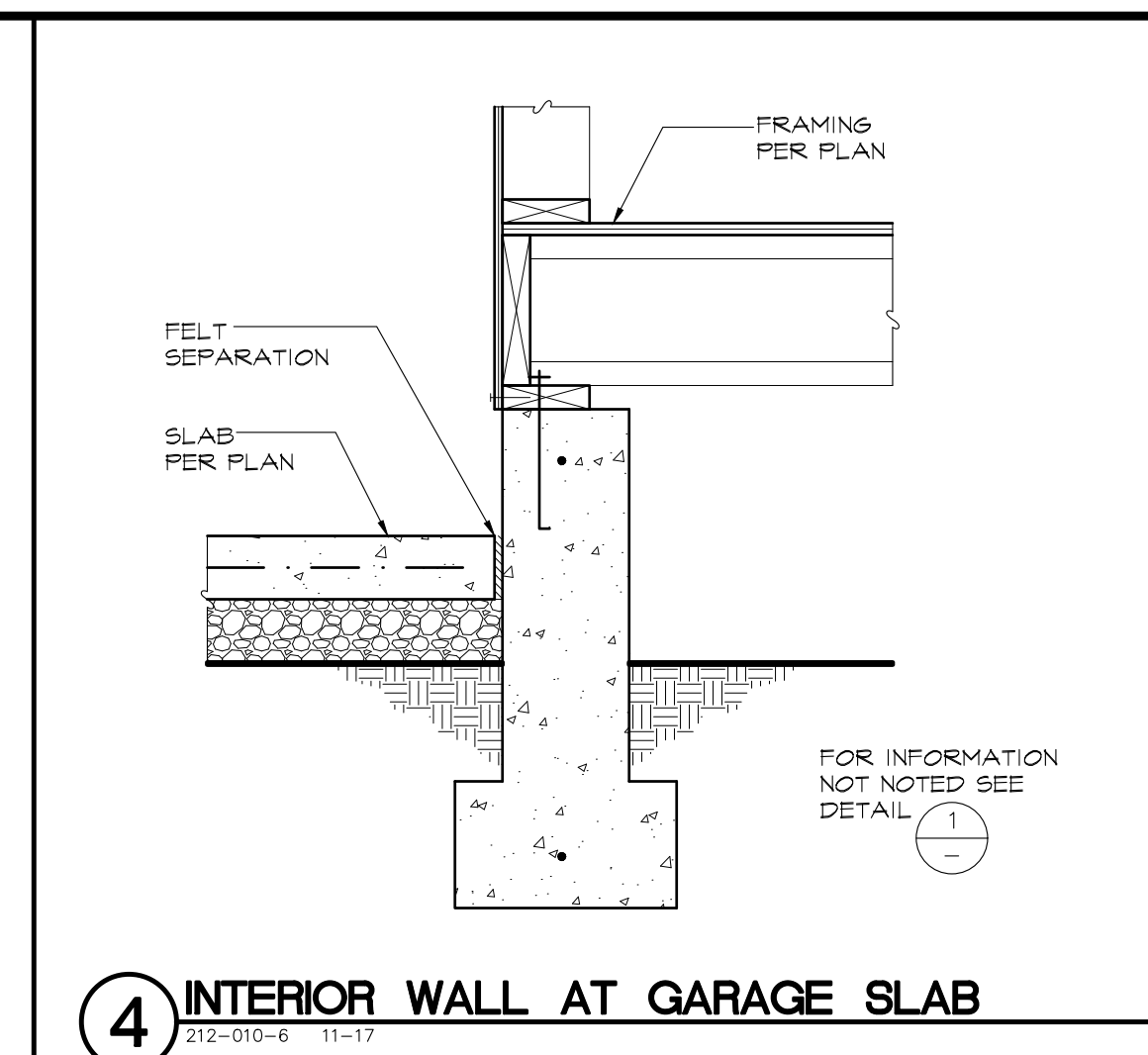
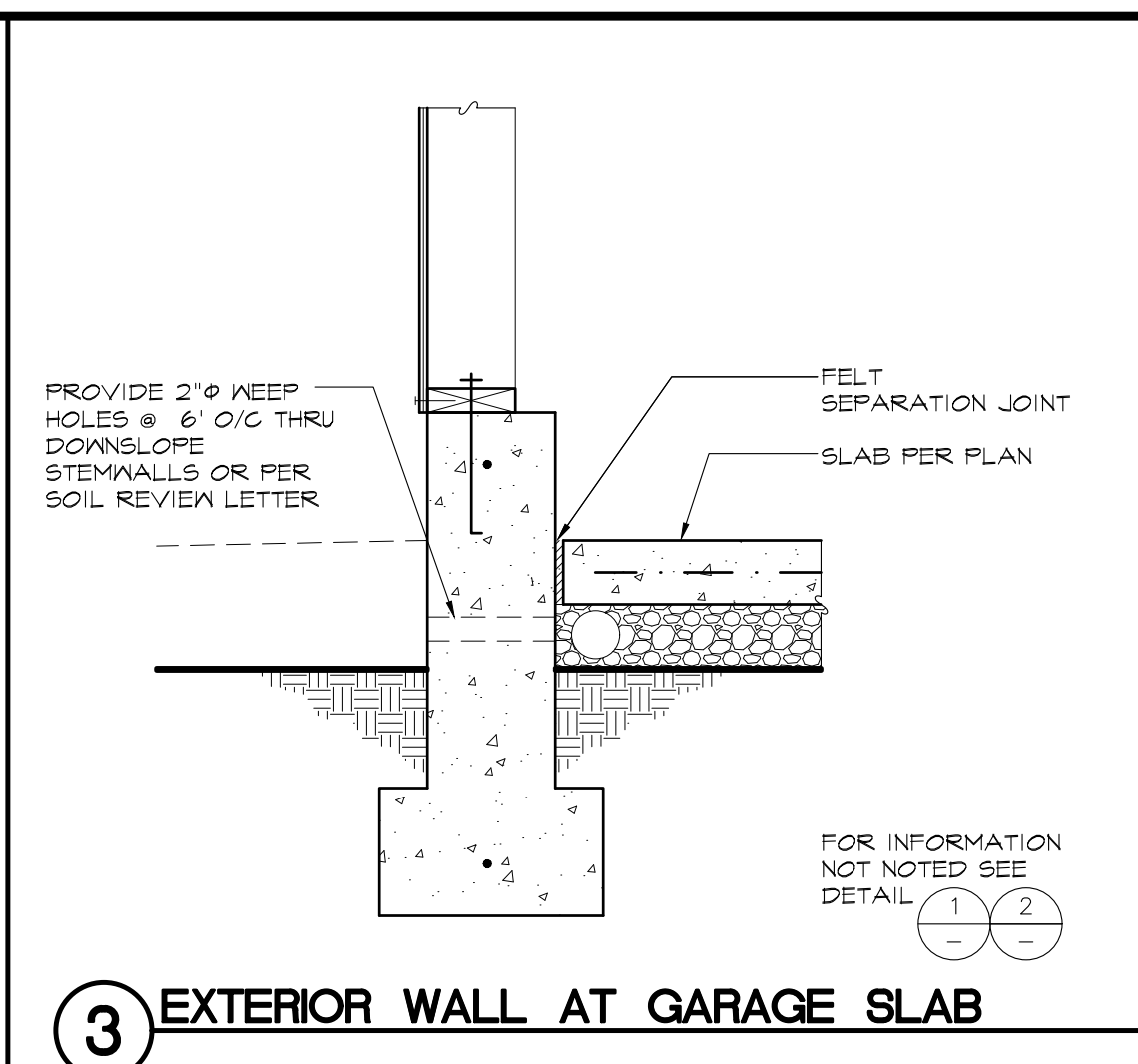
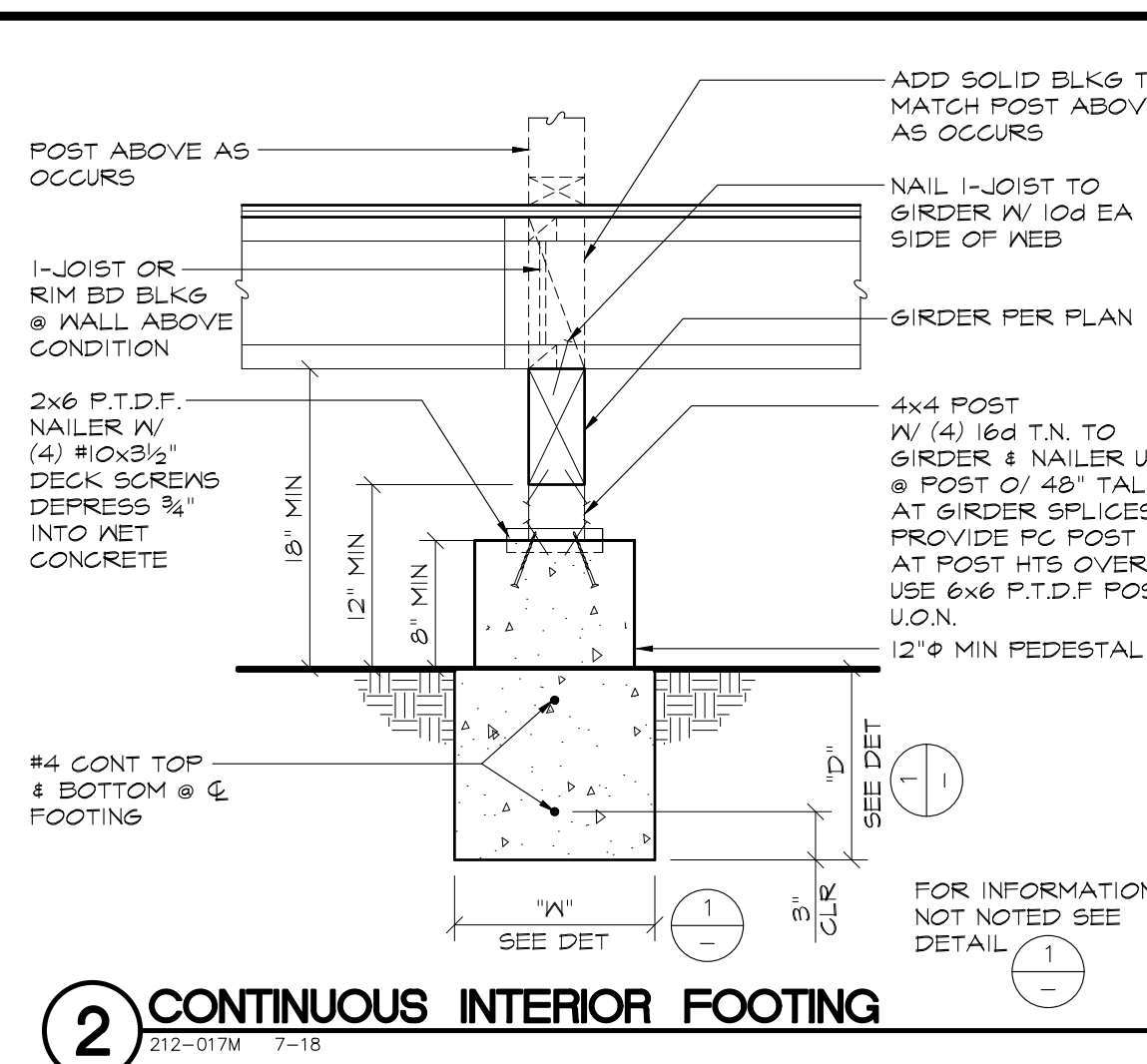
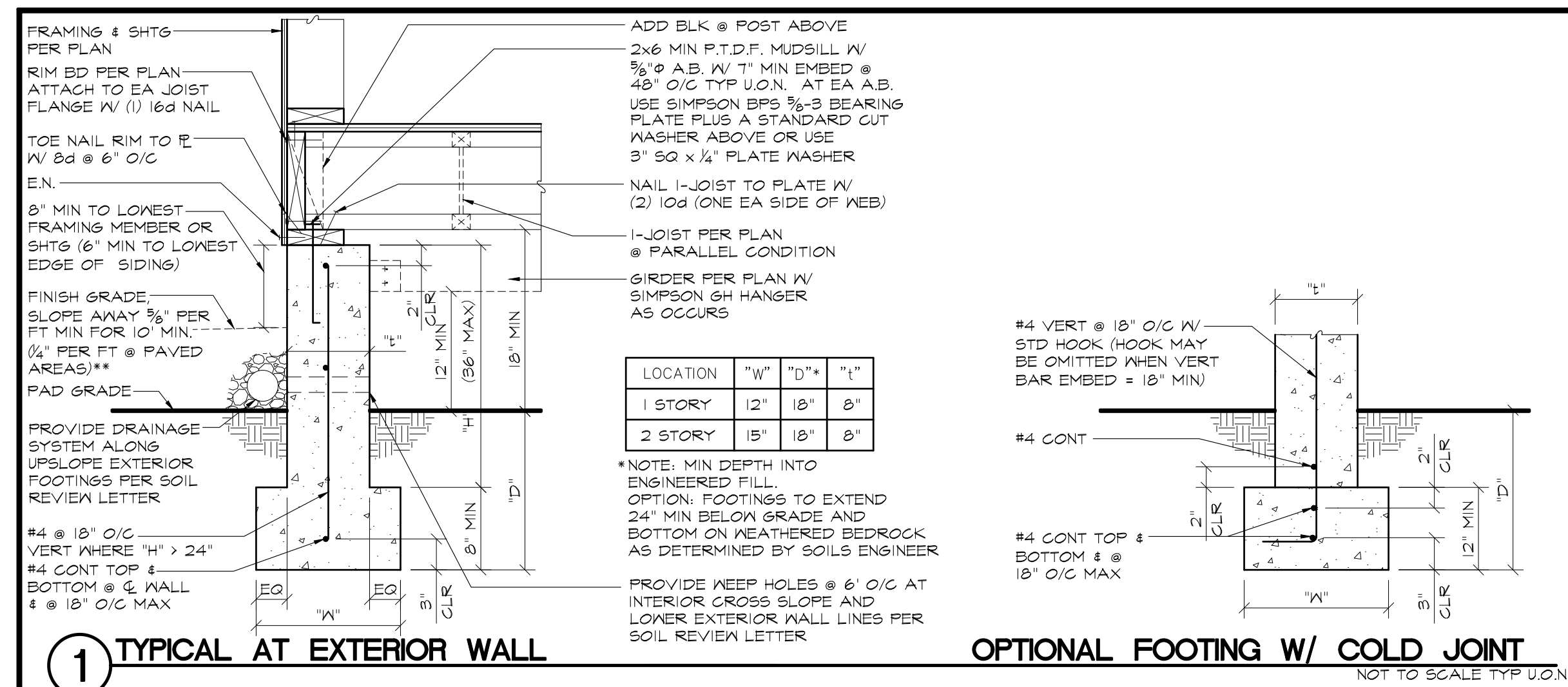
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S1.3

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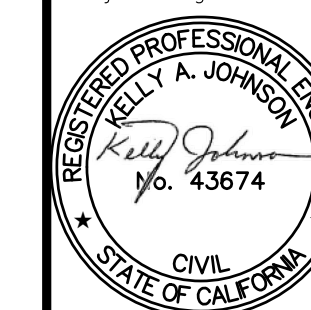
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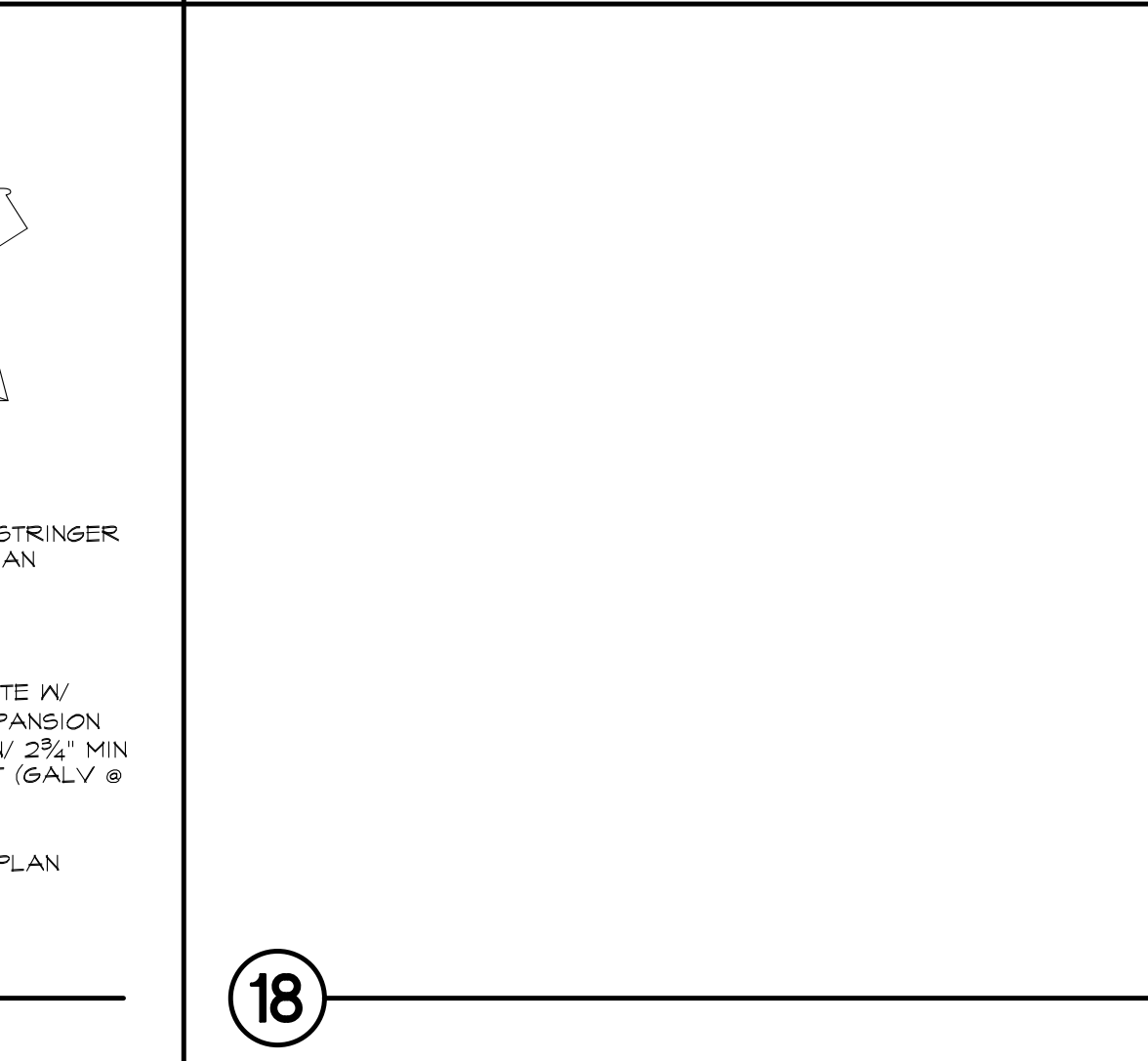
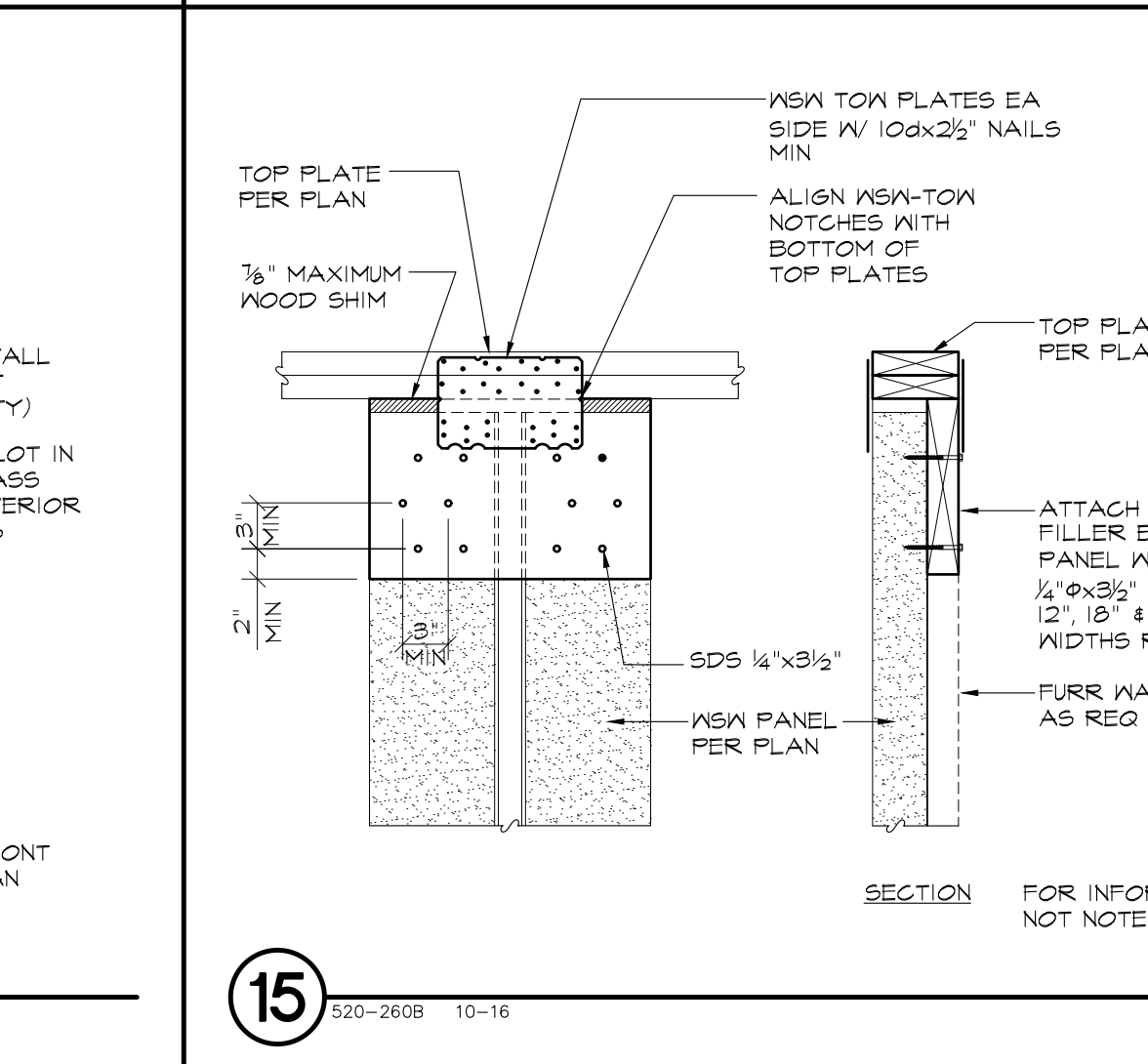
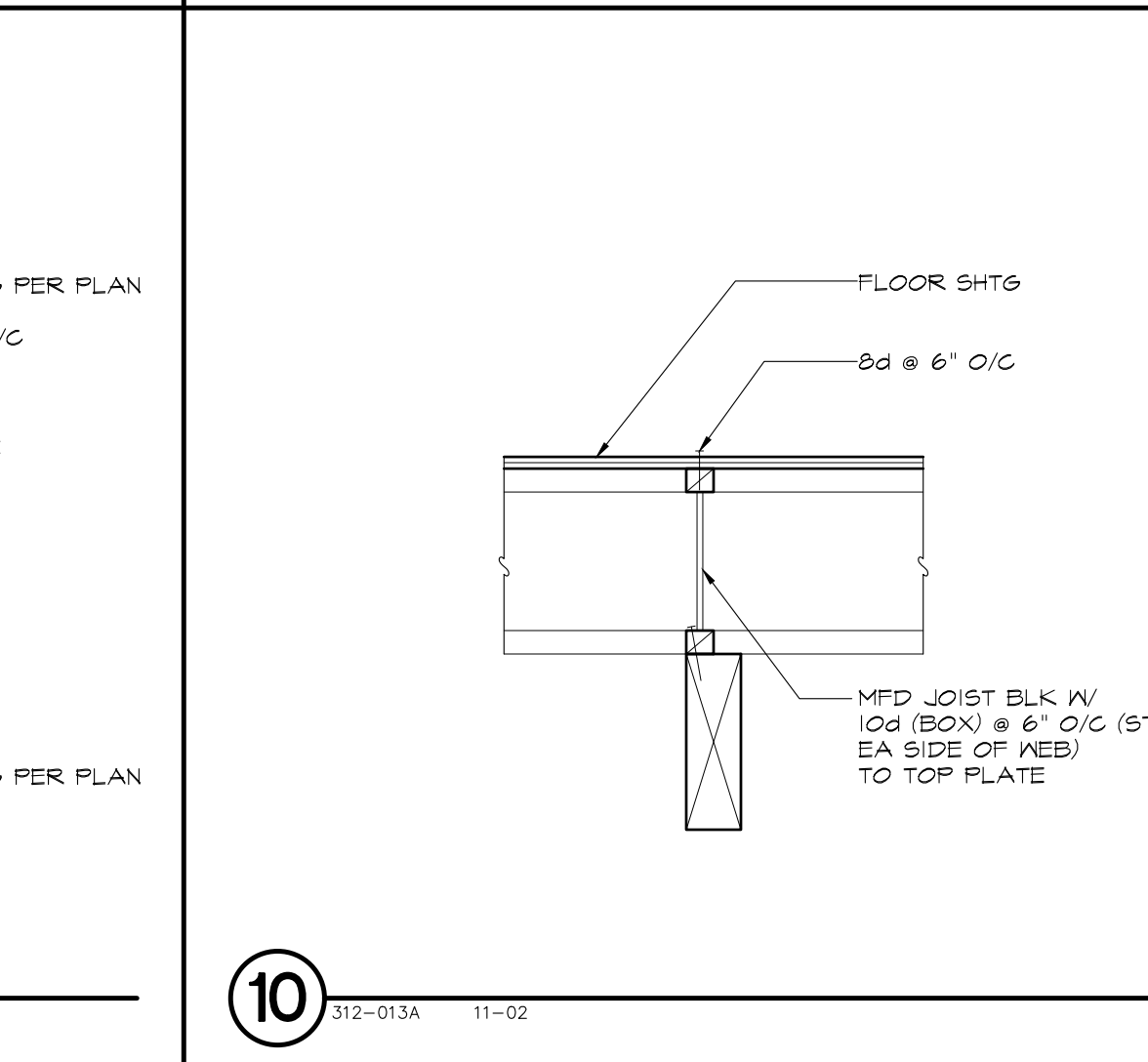
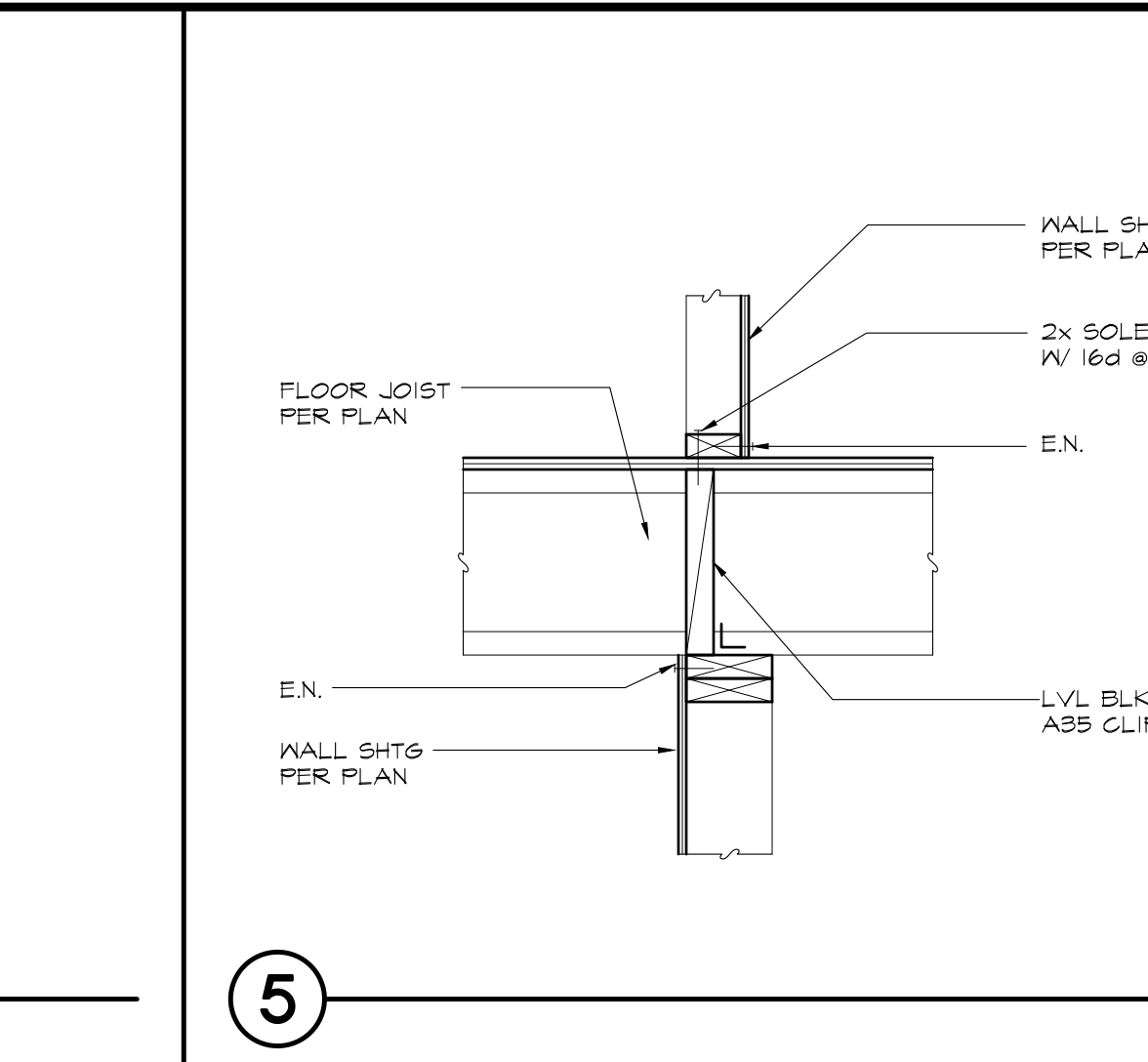
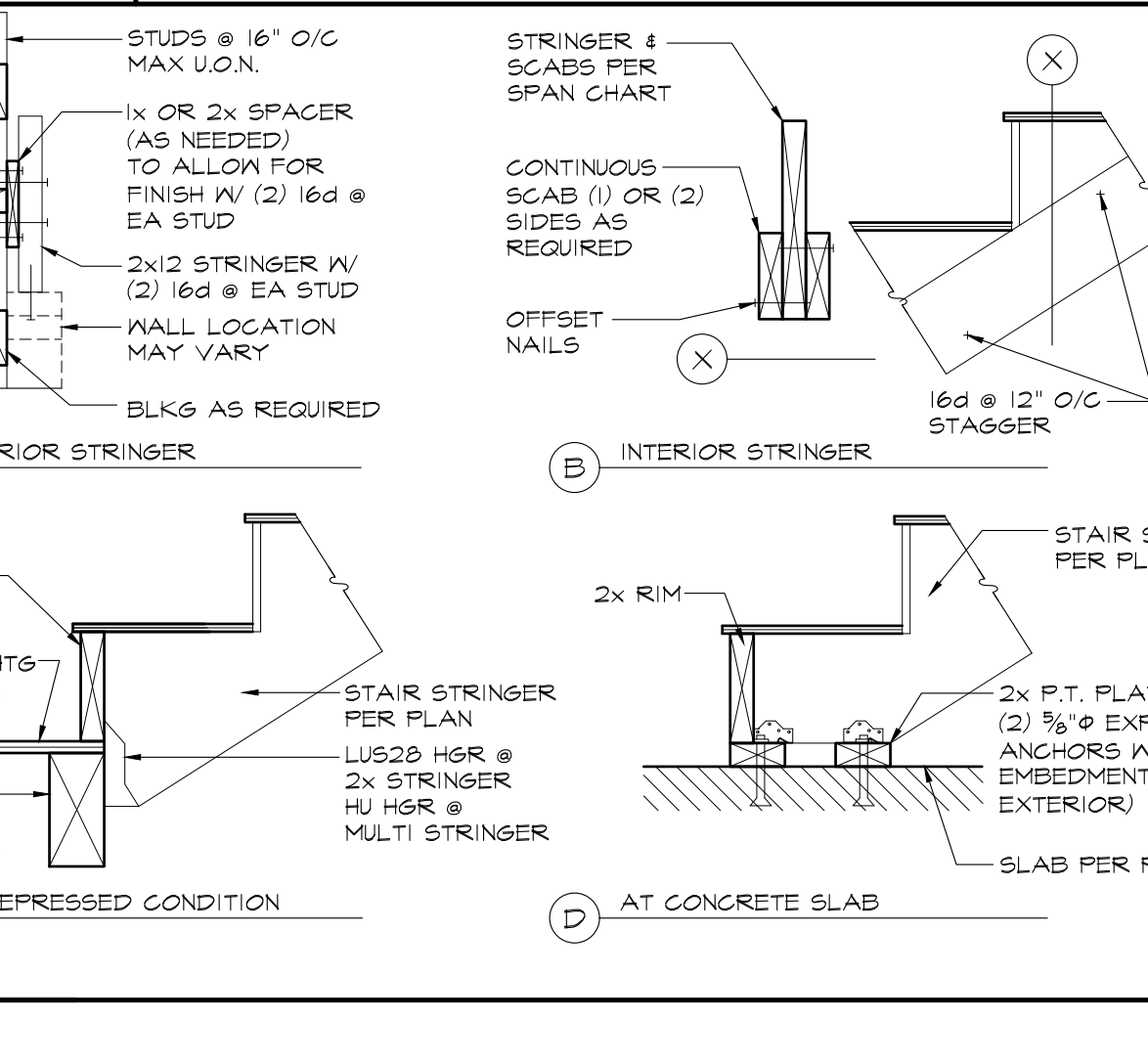
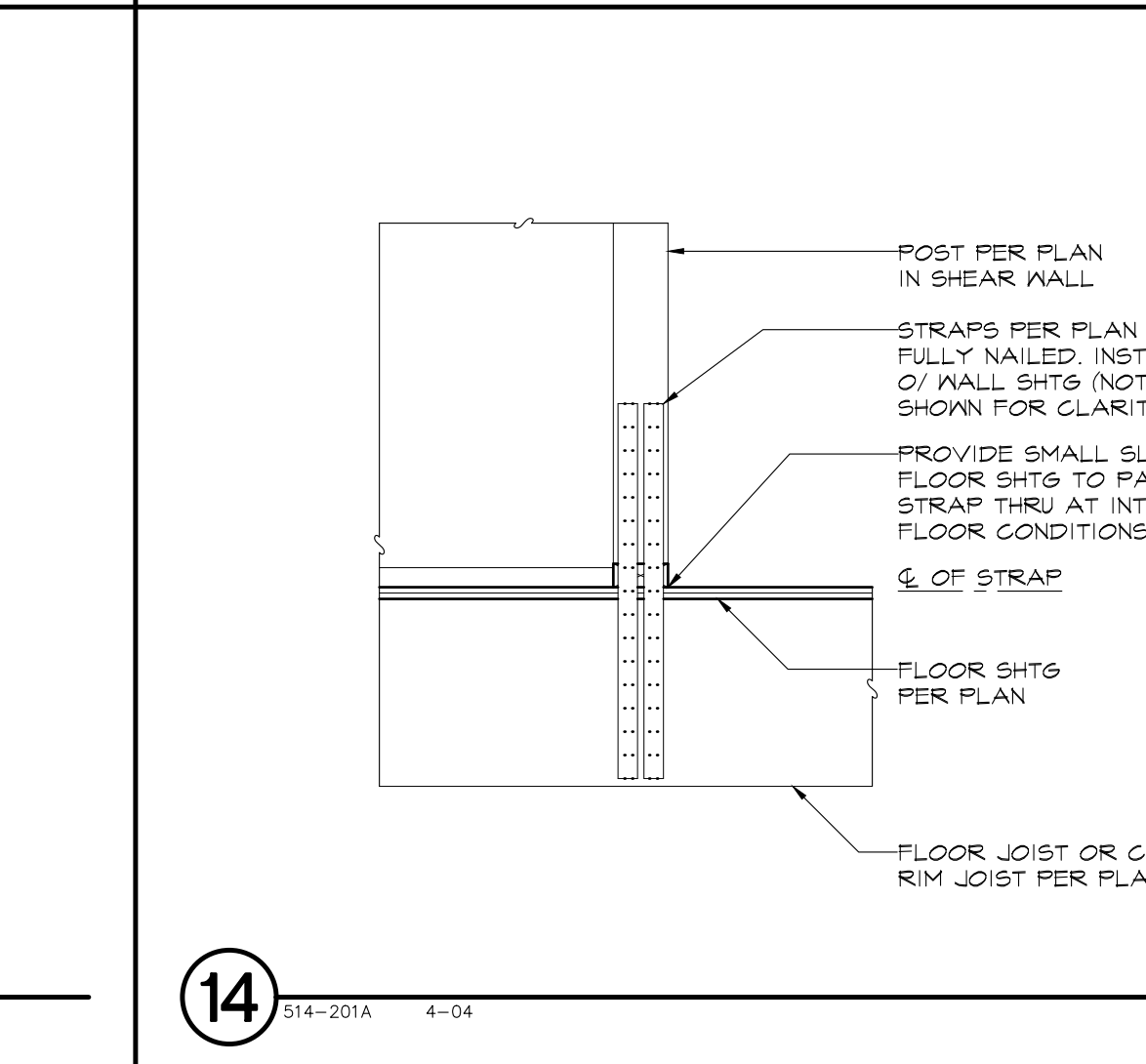
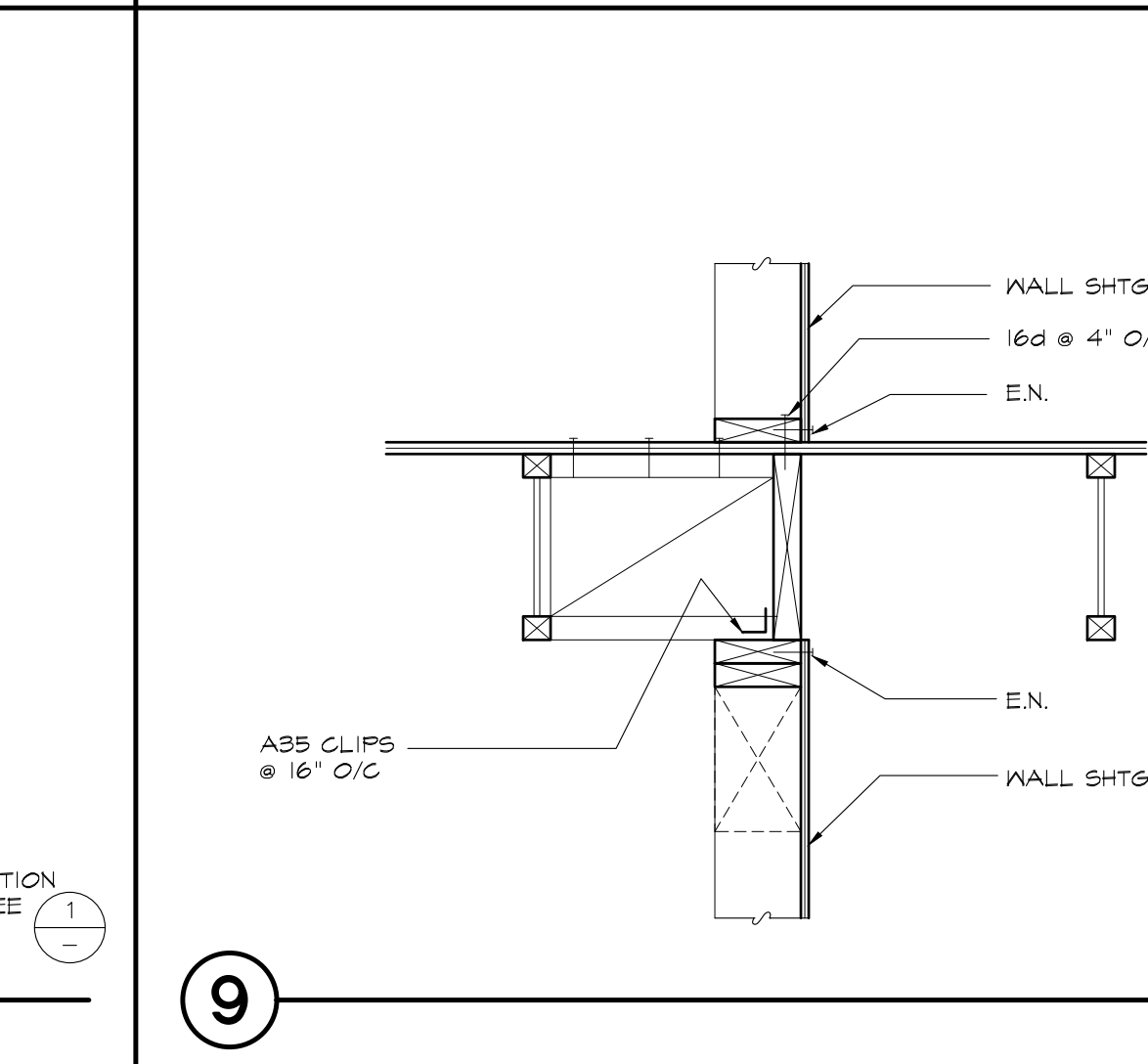
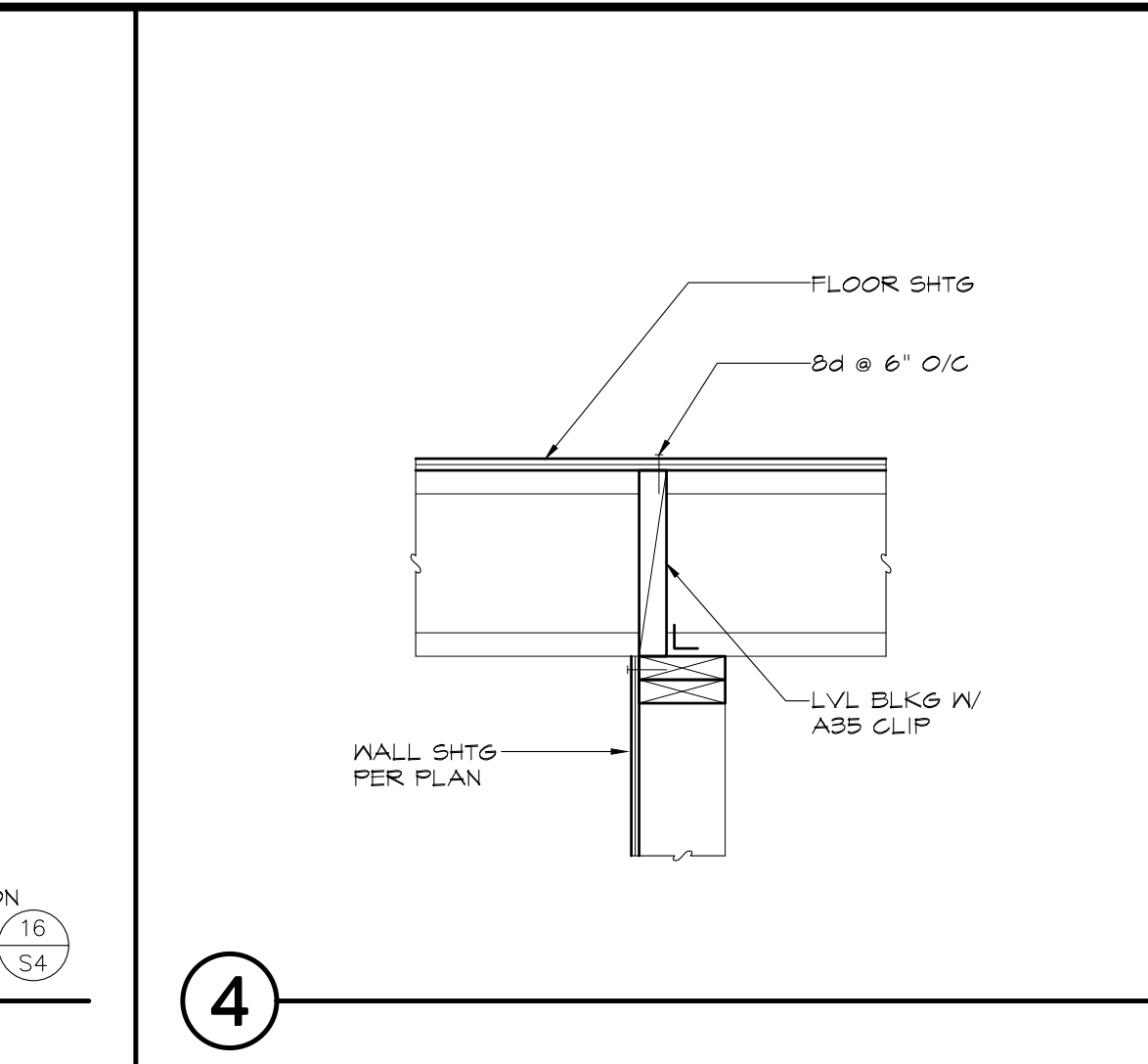
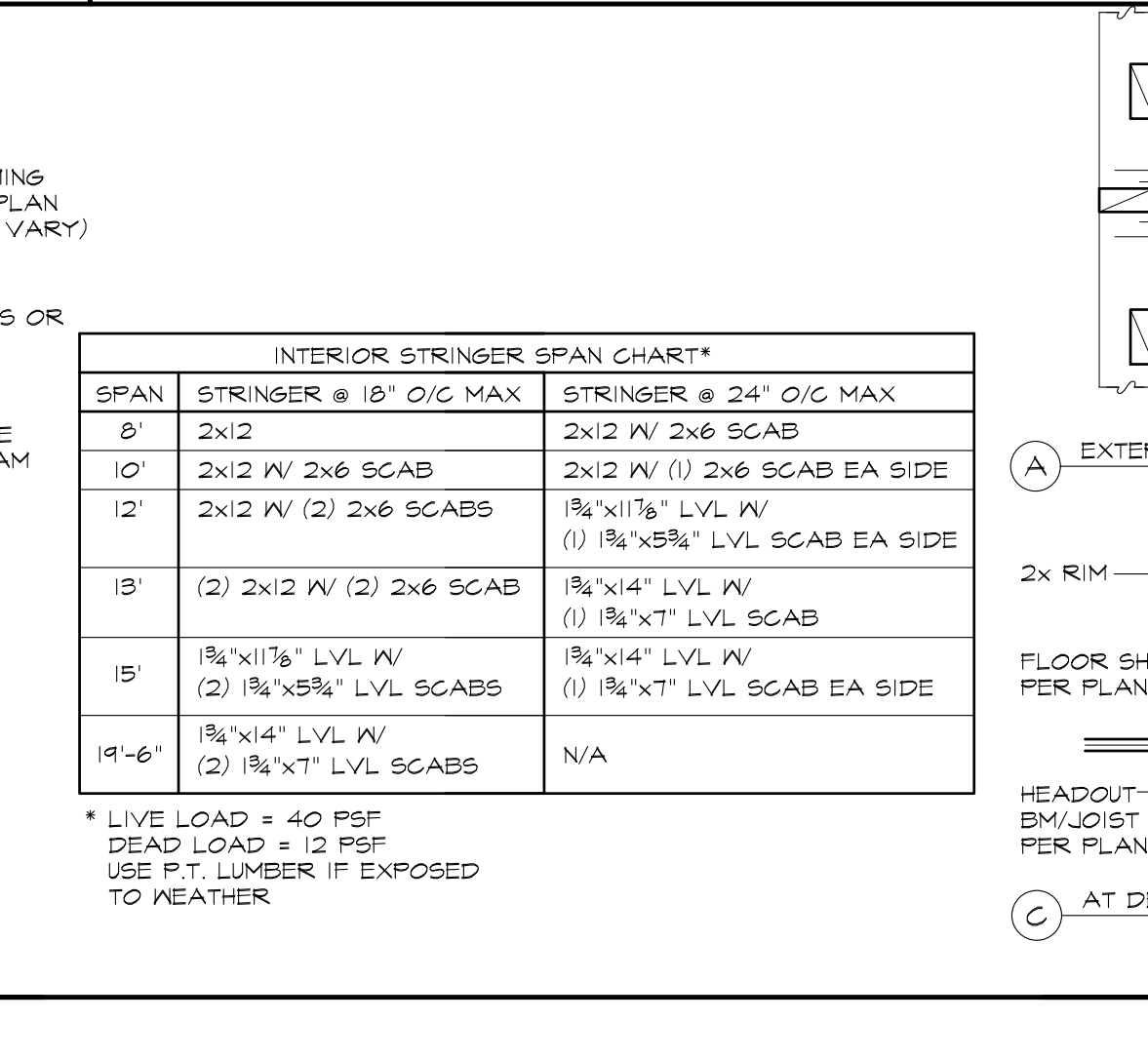
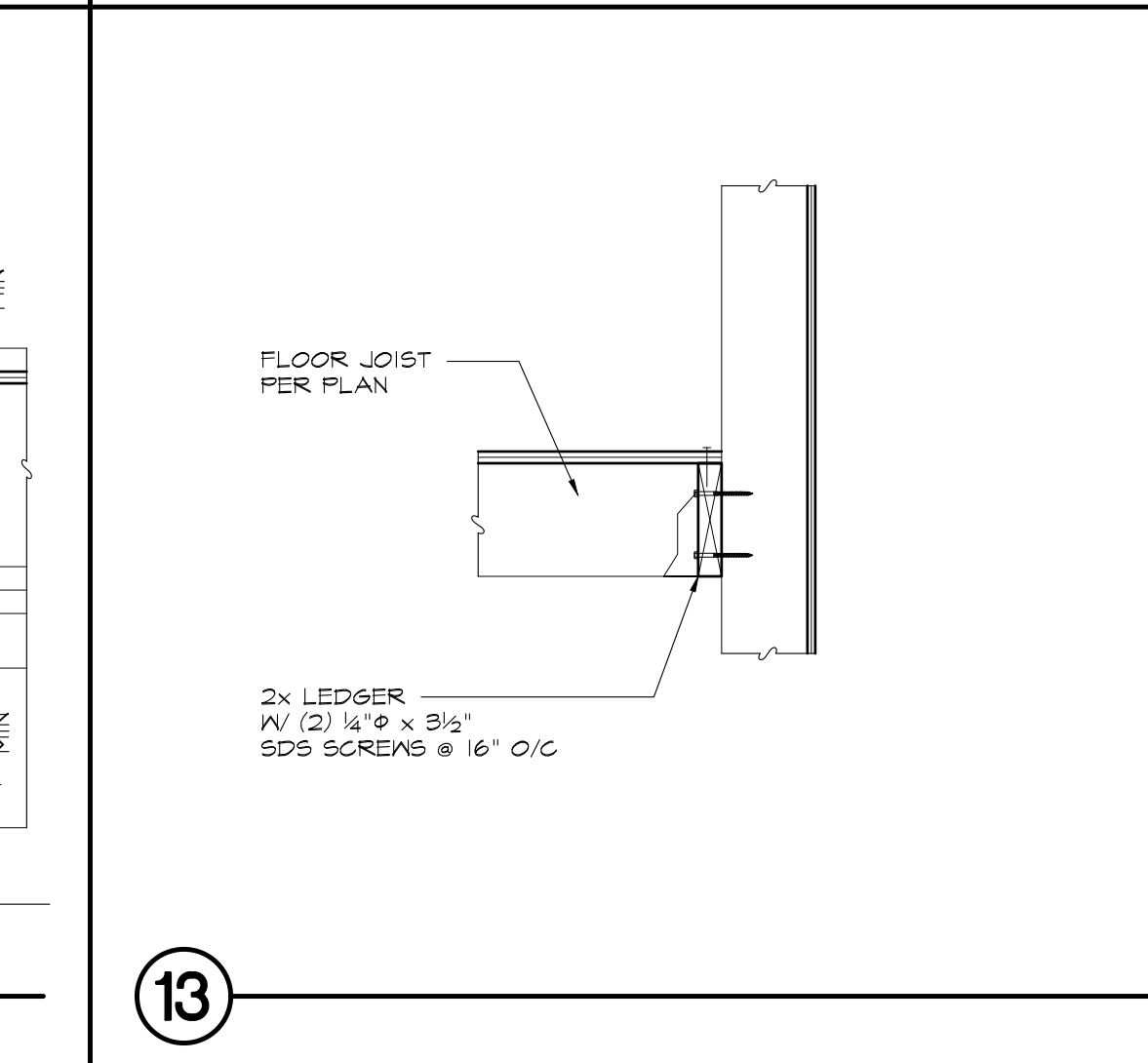
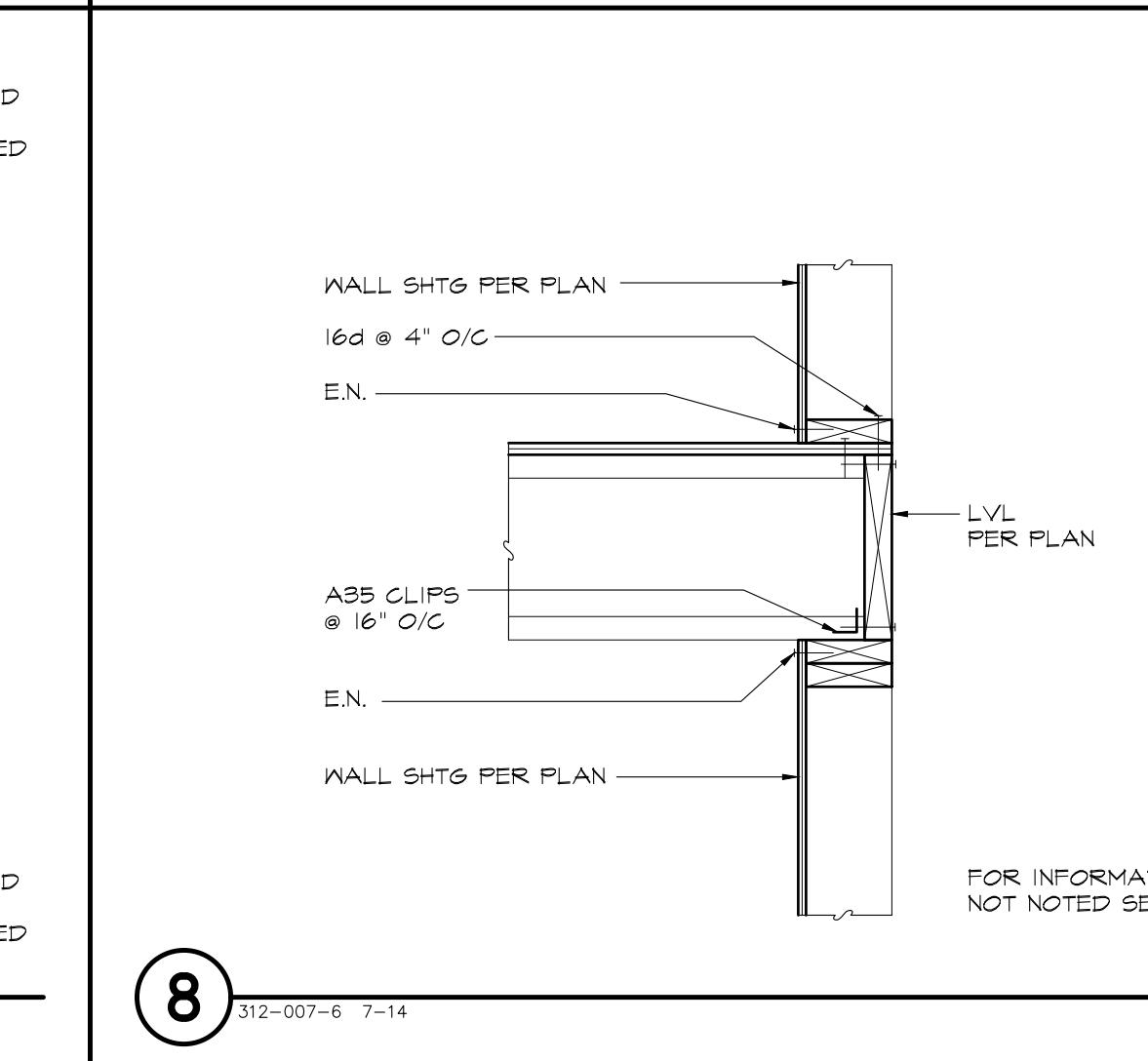
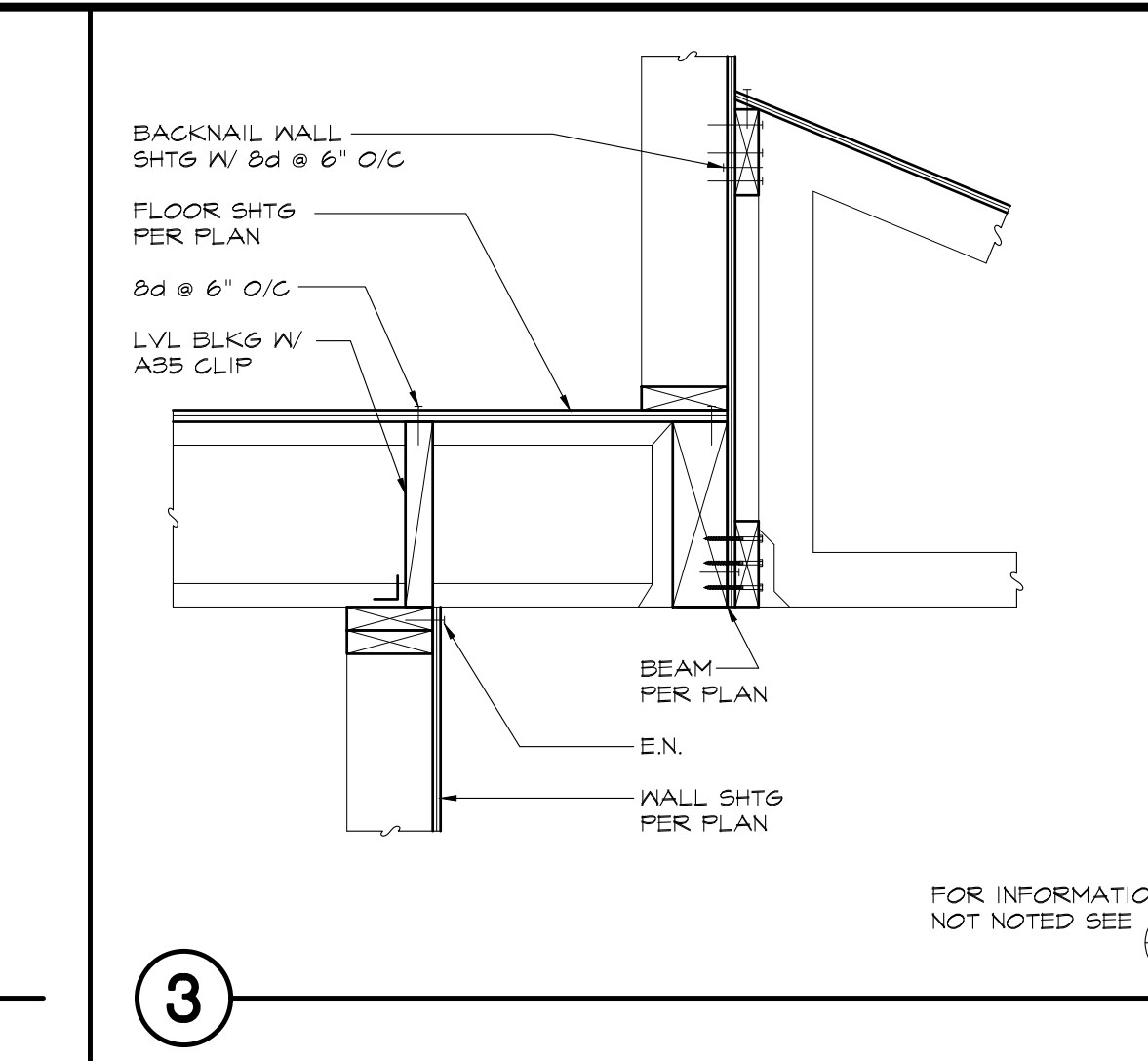
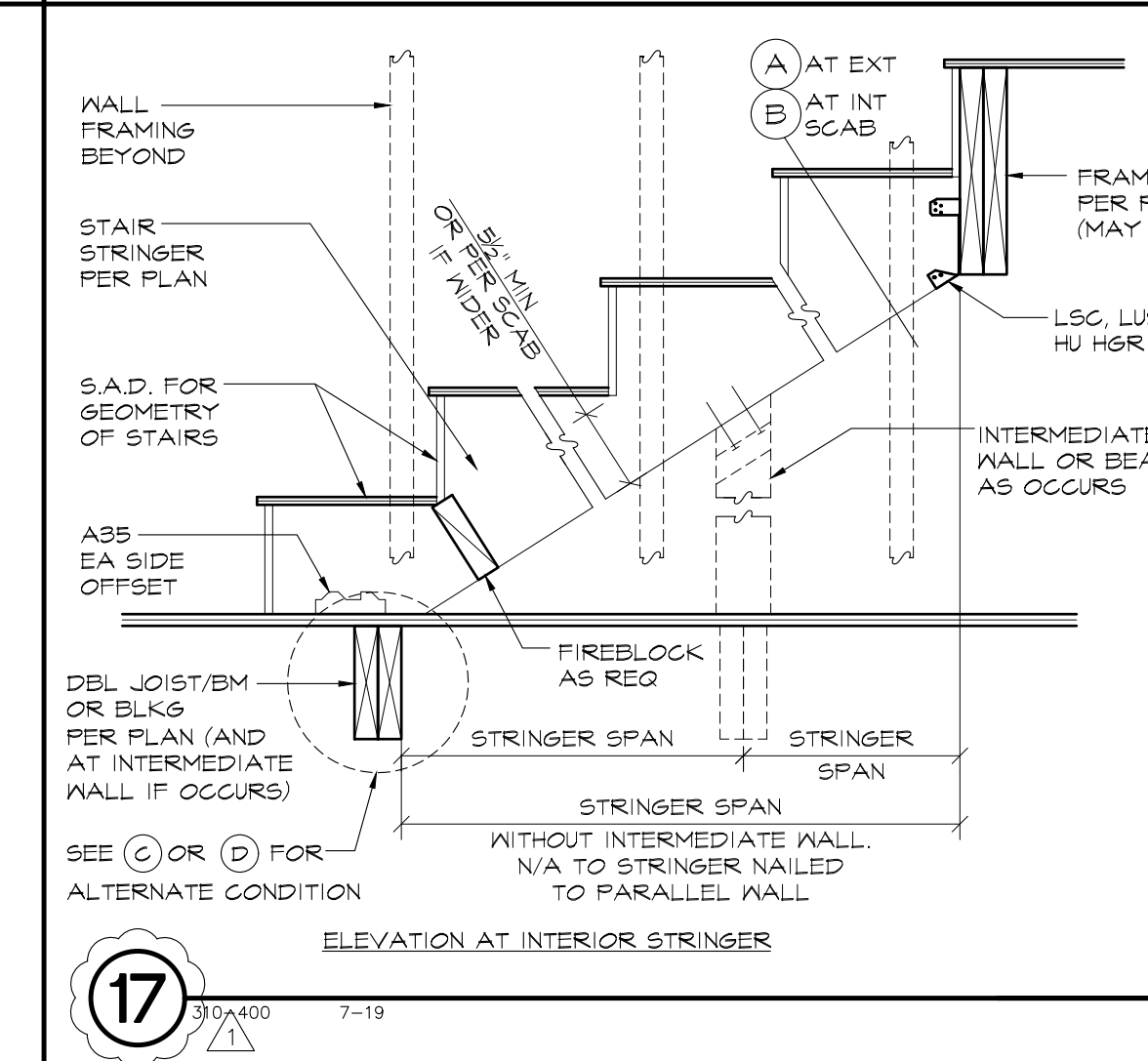
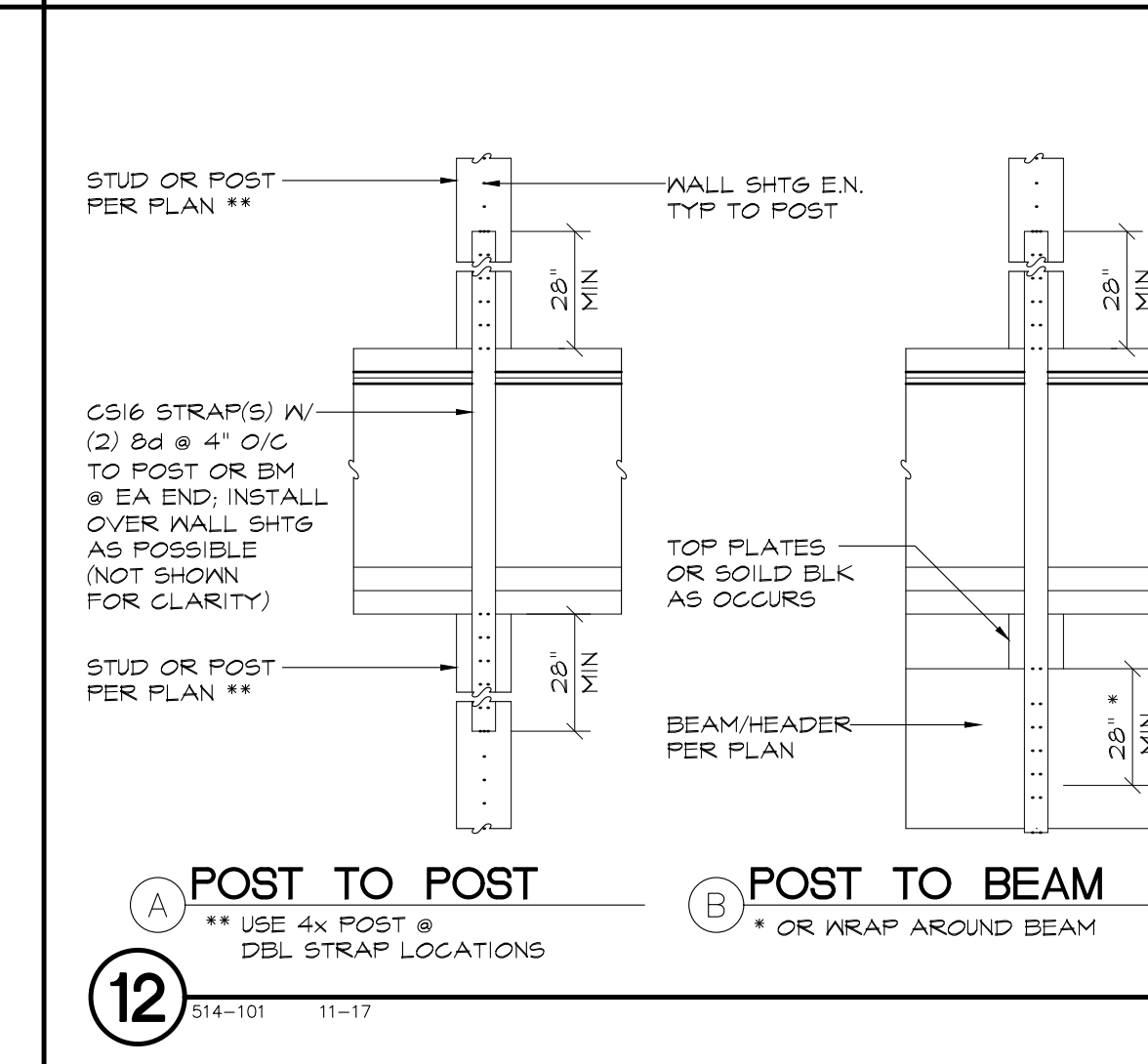
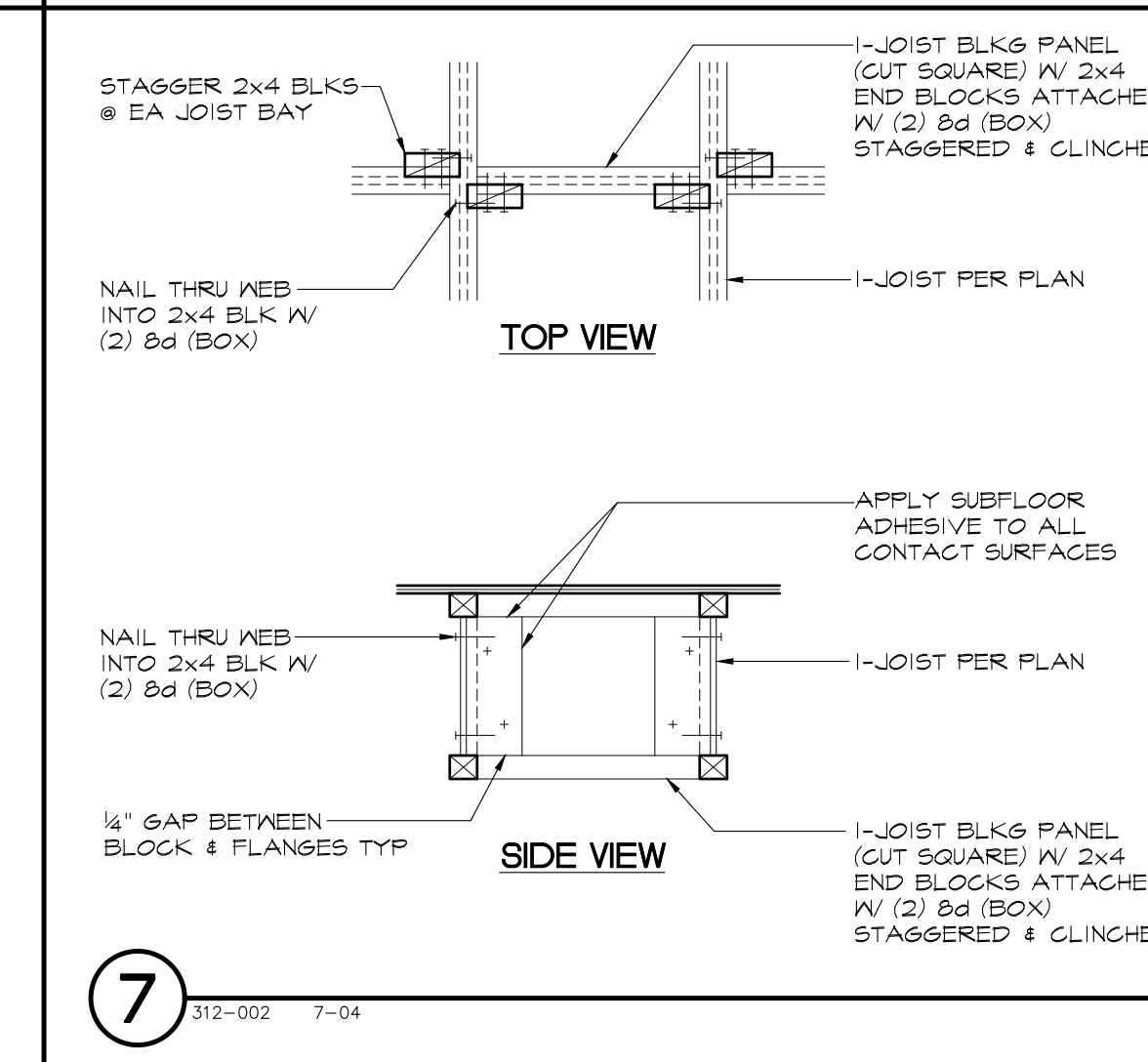
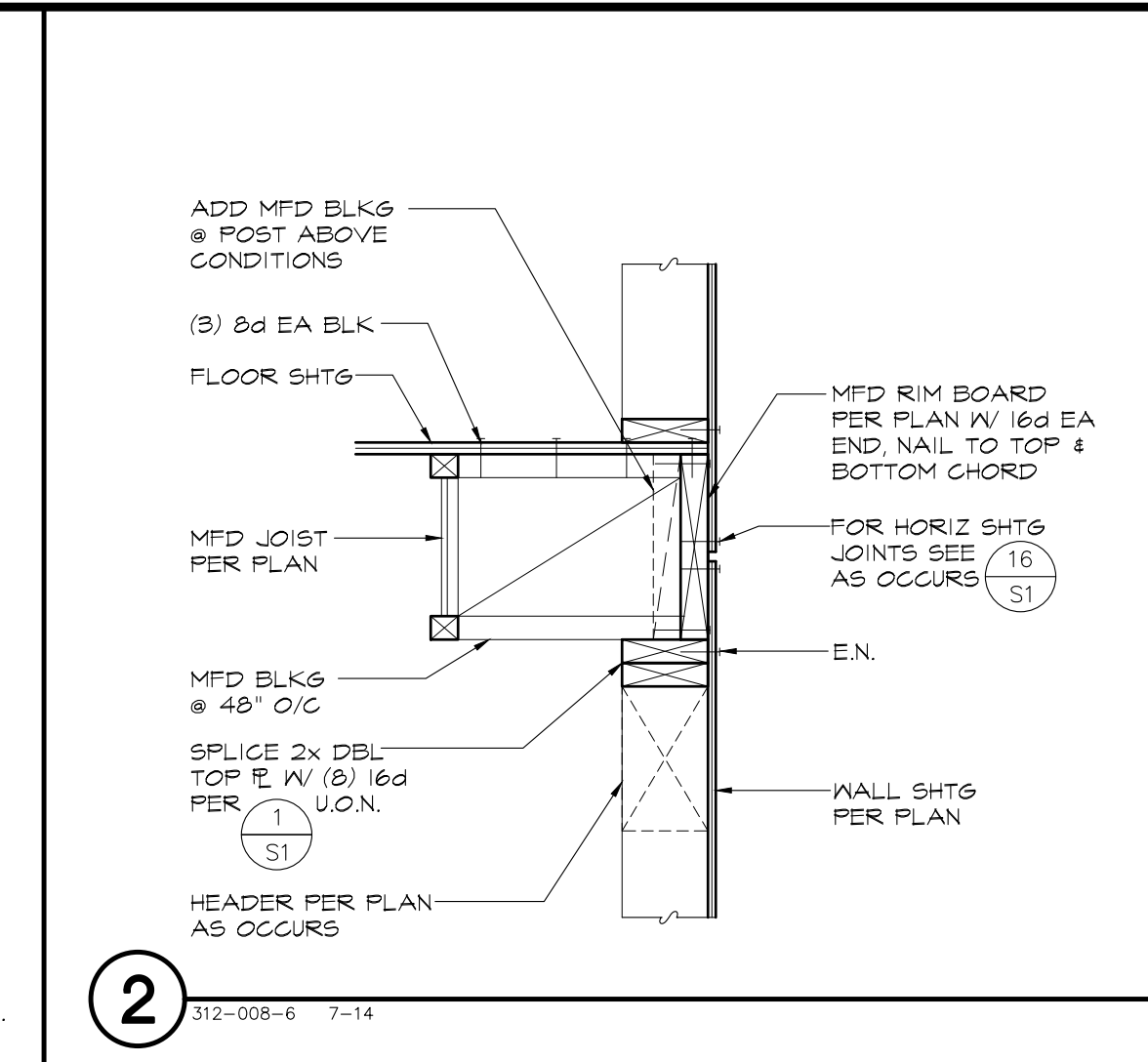
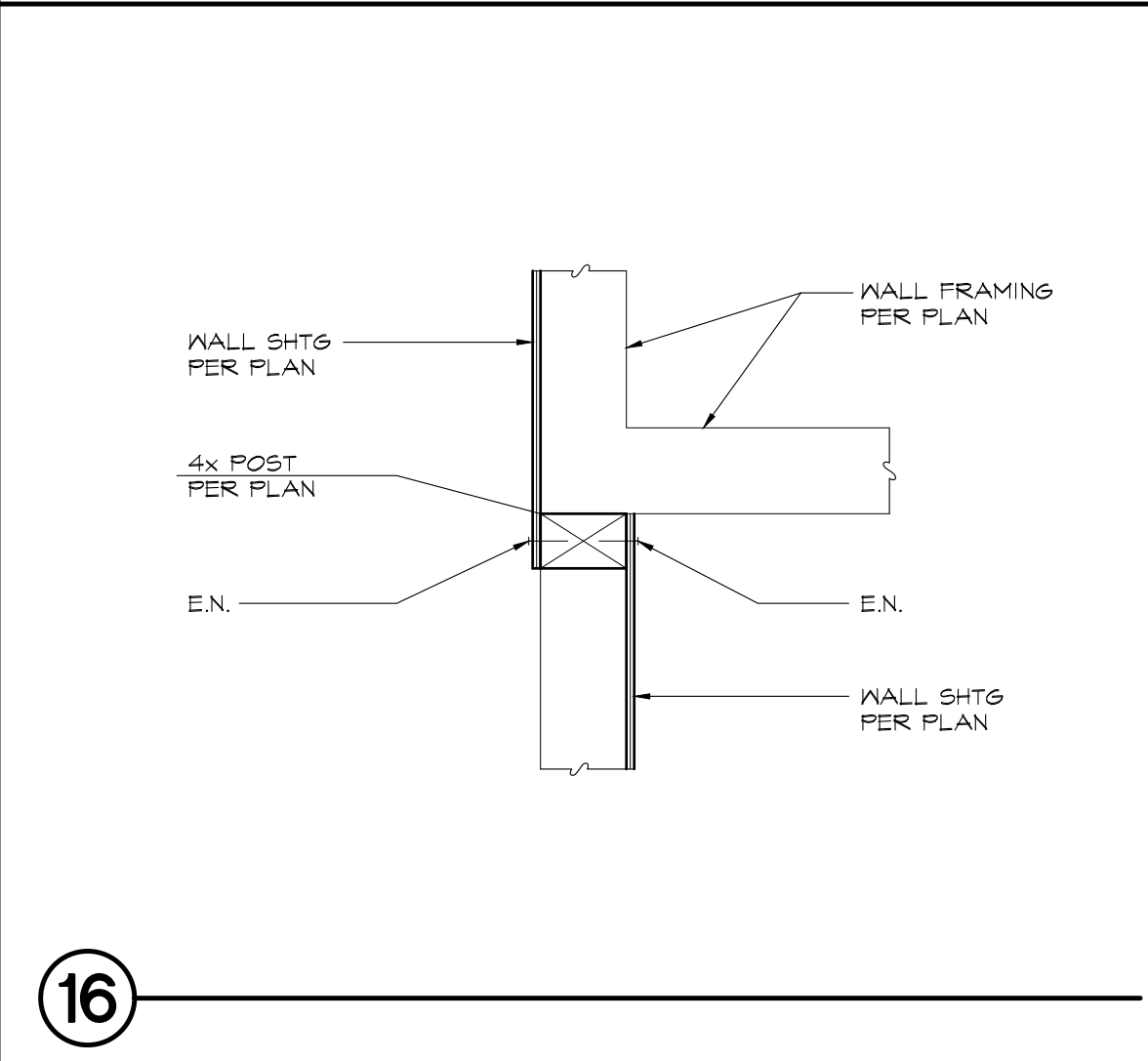
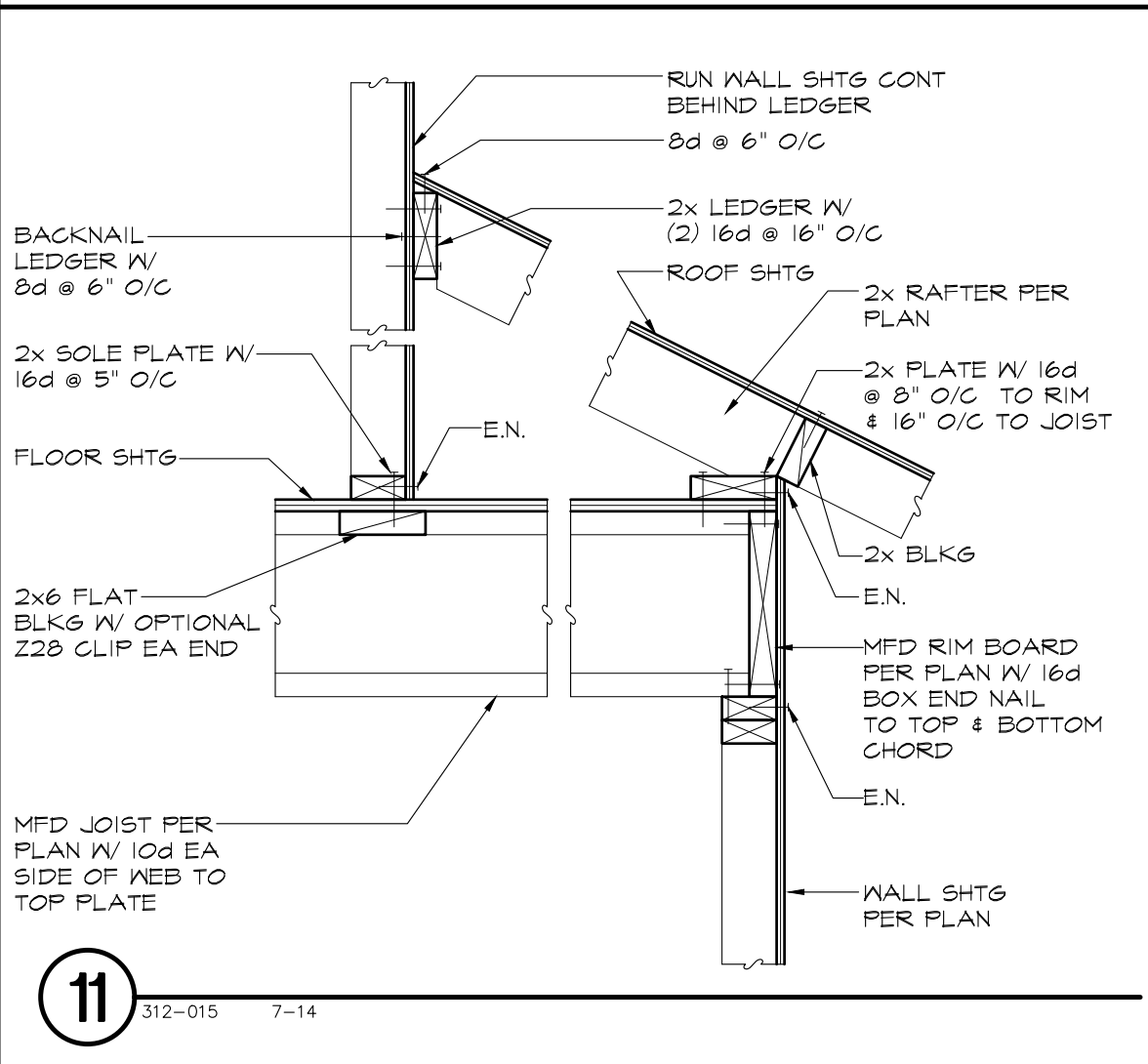
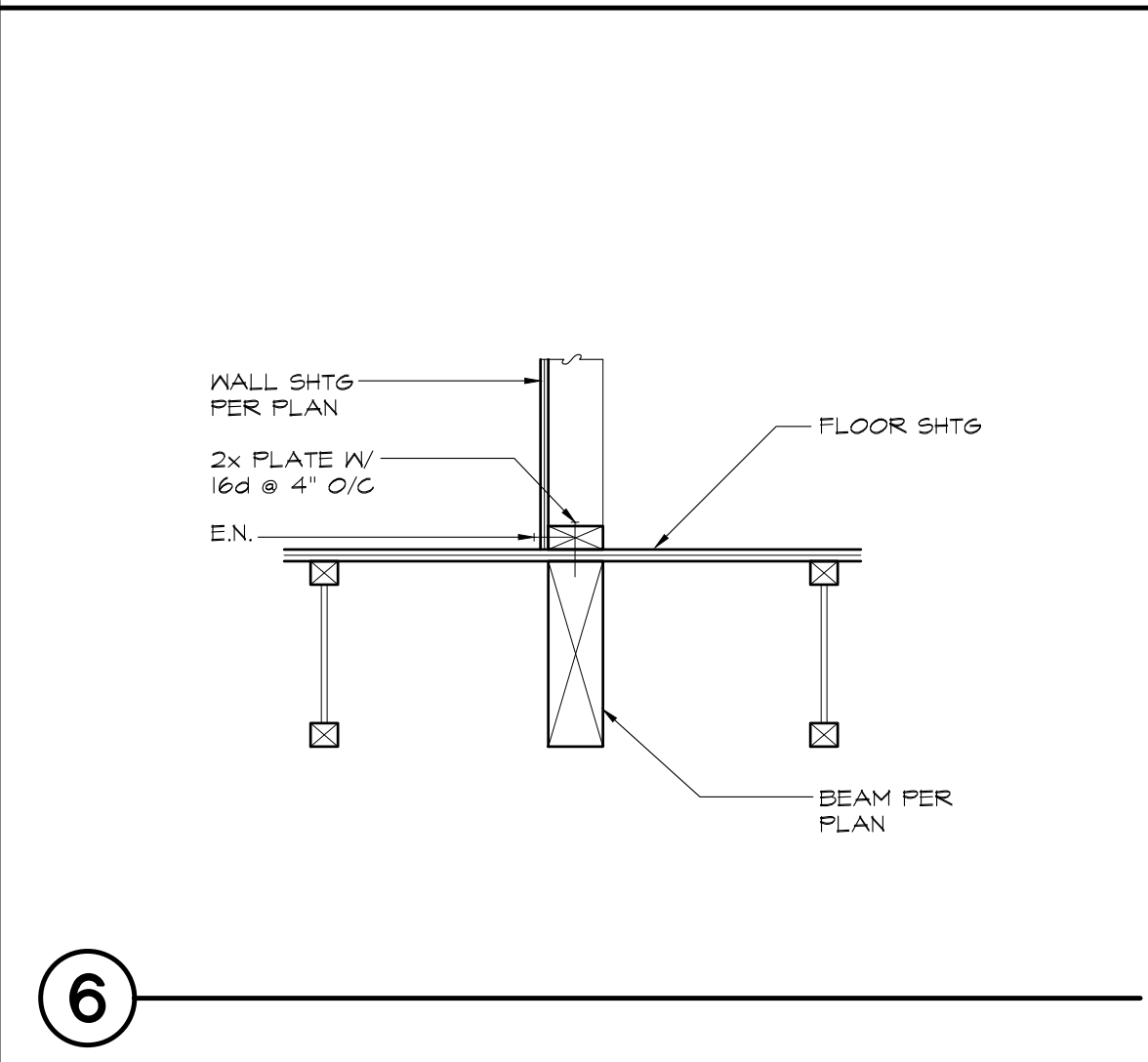
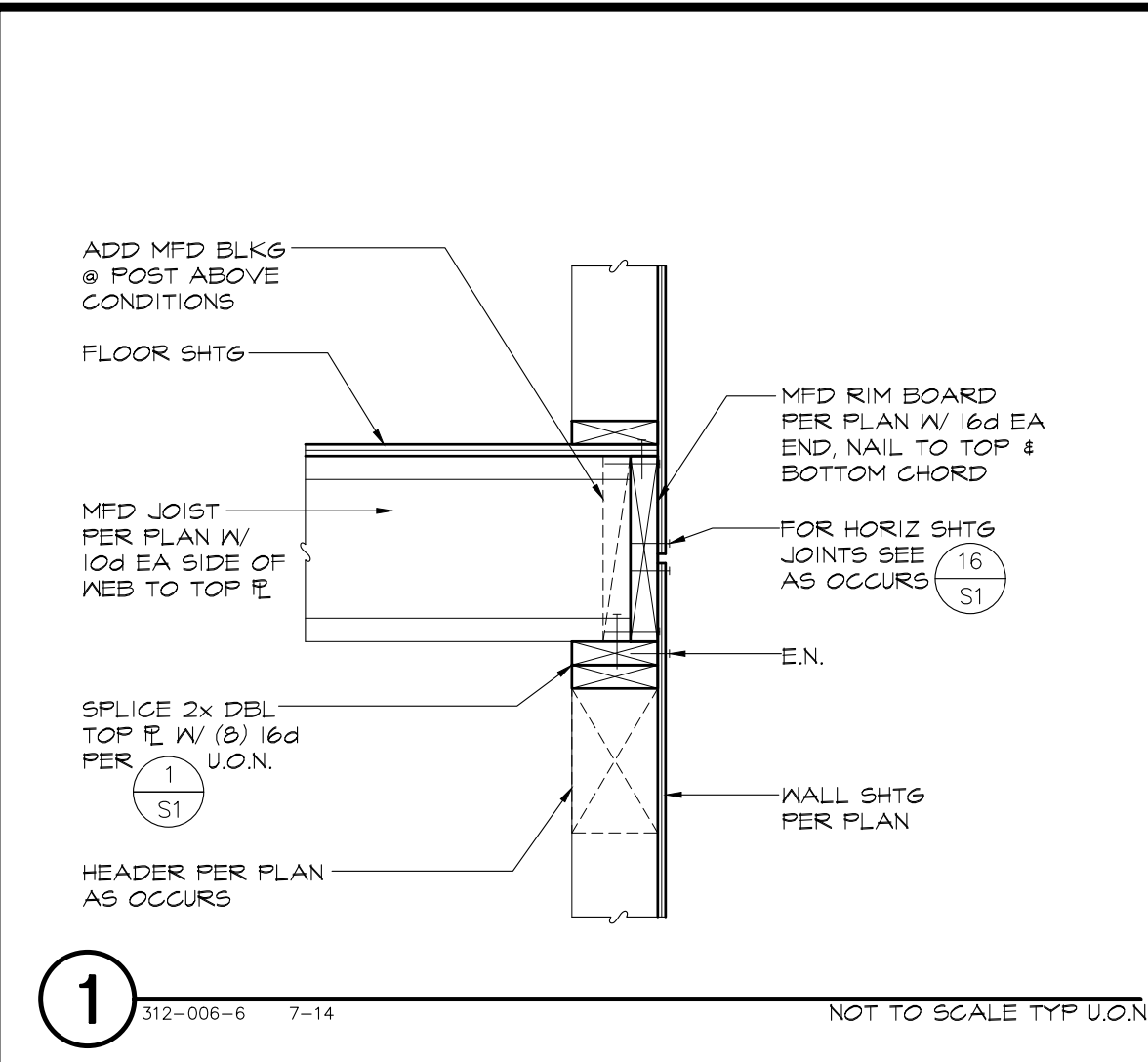
Drawn : M.L.

Job : 20062

Sheet

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REVISIONS

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8-6-20

PLAN CHECK

J.F.

File : 20062ST3

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MIGUEL ESCUTIA

3719 PAXTON PLACE

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Project Engineer :

KEVIN A. JOHNSON

REGISTERED PROFESSIONAL ENGINEER

NO. 43674

CIVIL

STATE OF CALIFORNIA

8-20-20

Date : 6-10-20

Engr : S.F.

Drawn : M.L.

Job : 20062

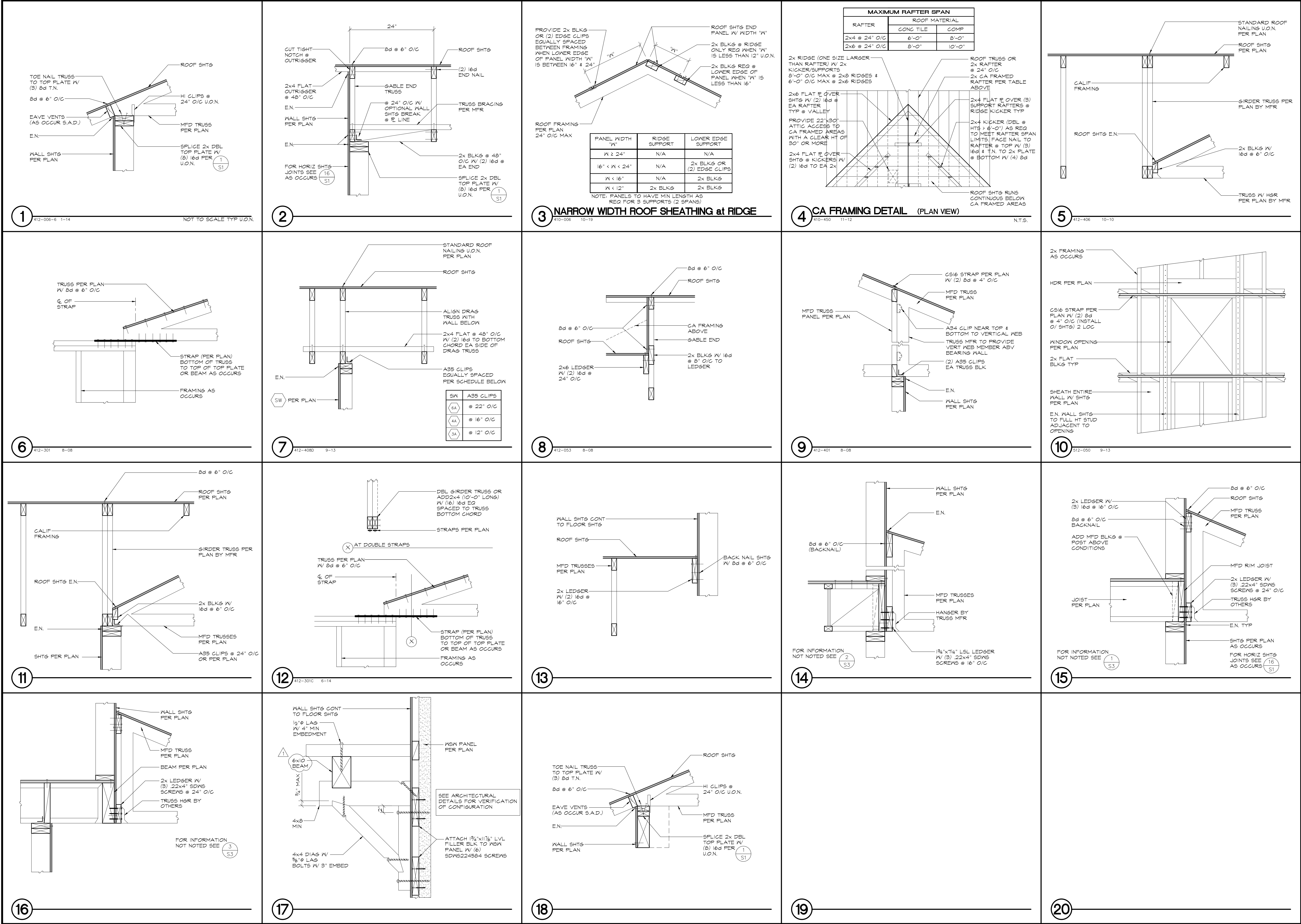
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S3

FF 20024

INTERIOR STRINGER SPAN CHART*			
SPAN	STRINGER @ 18" O/C MAX	STRINGER @ 24" O/C MAX	
8'	2x12	2x12 W/ 2x6 SCAB	
10'	2x12 W/ 2x6 SCAB	2x12 W/ (1) 2x6 SCAB EA SIDE	
12'	2x12 W/ (2) 2x6 SCABS	1 3/4"x11 7/8" LVL W/ (1) 1 3/4"x5 3/4" LVL SCAB EA SIDE	
13'	(2) 2x12 W/ (2) 2x6 SCAB	1 3/4"x14" LVL W/ (1) 1 3/4"x7" LVL SCAB	
15'	1 3/4"x11 7/8" LVL W/ (2) 1 3/4"x5 3/4" LVL SCABS	1 3/4"x14" LVL W/ (1) 1 3/4"x7" LVL SCAB EA SIDE	
19'-6"	1 3/4"x14" LVL W/ (2) 1 3/4"x7" LVL SCABS	N/A	

* LIVE LOAD = 40 PSF
DEAD LOAD = 12 PSF
USE P.T. LUMBER IF EXPOSED TO WEATHER



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S4
FF 20024